

# EXHIBIT 1

A.A.P.L. FORM 610 - 1989

**MODEL FORM OPERATING AGREEMENT**

OPERATING AGREEMENT

DATED

October 18, 2010,  
year

OPERATOR Chesapeake Appalachia, L.L.C.

CONTRACT AREA Baltzley North Unit  
Rush Township

COUNTY OR PARISH OF Susquehanna STATE OF Pennsylvania

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AMERICAN ASSOCIATION OF PETROLEUM  
LANDMEN, 4100 FOSSIL CREEK BLVD.  
FORT WORTH, TEXAS, 76137, APPROVED  
FORM.

A.A.P.L. NO. 610 – 1989



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## OPERATING AGREEMENT

THIS AGREEMENT, entered into by and between Chesapeake Appalachia, L.L.C., hereinafter designated and referred to as "Operator," and the signatory party or parties other than Operator, sometimes hereinafter referred to individually as "Non-Operator," and collectively as "Non-Operators."

## WITNESSETH:

WHEREAS, the parties to this agreement are owners of Oil and Gas Leases and/or Oil and Gas Interests in the land identified in Exhibit "A," and the parties hereto have reached an agreement to explore and develop these Leases and/or Oil and Gas Interests for the production of Oil and Gas to the extent and as hereinafter provided,

NOW, THEREFORE, it is agreed as follows:

## ARTICLE I.

## DEFINITIONS

As used in this agreement, the following words and terms shall have the meanings here ascribed to them:

A. The term "AFE" shall mean an Authority for Expenditure prepared by a party to this agreement for the purpose of an AFE for the drilling of a vertical or horizontal well must be prepared in compliance with Article XVI hereof, incurred in conducting and estimating the costs to be operation hereunder.

B. The term "Completion" or "Complete" shall mean a single operation intended to complete a well as a producer of Oil and Gas in one or more Zones, including, but not limited to, the setting of production casing, perforating, well stimulation and production testing conducted in such operation.

C. The term "Contract Area" shall mean all of the lands, Oil and Gas Leases and/or Oil and Gas Interests intended to be developed and operated for Oil and Gas purposes under this agreement. Such lands, Oil and Gas Leases and Oil and Gas Interests are described in Exhibit "A."

D. The term "Deepen" shall mean a single operation whereby a well is drilled to an objective Zone below the deepest Zone in which the well was previously drilled, or below the Deepest Zone proposed in the associated AFE, whichever is the lesser.

E. The terms "Drilling Party" and "Consenting Party" shall mean a party who agrees to join in and pay its share of the cost of any operation conducted under the provisions of this agreement.

F. The term "Drilling Unit" shall mean the area fixed for the drilling of one well by order or rule of any state or federal body having authority. If a Drilling Unit is not fixed by any such rule or order, a Drilling Unit shall be the drilling unit as established by the pattern of drilling in the Contract Area unless fixed by express agreement of the Drilling Parties. The Drilling Unit for a horizontal well shall be determined by the Operator in consultation with Non-Operator, and conform with any restrictions in the agreement or conveyances creating the Oil and Gas Interests to be included in the Drilling Unit and applicable laws and be formed in such size and shape as needed to maximize the recovery of oil and gas through the use of multiple laterals.

G. The term "Drillsite" shall mean the Oil and Gas Lease or Oil and Gas Interest on which a proposed well is to be located.

G.1 The term "Force Majeure" shall mean anything act or occurrence beyond a party's control that delays or prohibits performance of any operation contemplated hereunder, including but not limited to the building of surface location, the drilling completion or operating of a well, laying pipeline or other physical operation. Force Majeure events include but are not limited to Acts of God, inclement weather, governmental action or intervention, changes in existing laws or enforcement of existing laws and permitting delays.

H. The term "Initial Well" shall mean the well required to be drilled by the parties hereto as provided in Article VI.A.

I. The term "Non-Consent Well" shall mean a well in which less than all parties have conducted an operation as provided in Article VI.B.2.

J. The terms "Non-Drilling Party" and "Non-Consenting Party" shall mean a party who elects not to participate in a proposed operation.

K. The term "Oil and Gas" shall mean oil, gas, casinghead gas, gas condensate, and/or all other liquid or gaseous hydrocarbons and other marketable substances produced therewith, unless an intent to limit the inclusiveness of this term is specifically stated.

L. The term "Oil and Gas Interests" or "Interests" shall mean unleased fee and mineral interests in Oil and Gas in tracts

1 of land lying within the Contract Area which are owned by parties to this agreement.

2 M. The terms "Oil and Gas Lease," "Lease" and "Leasehold" shall mean the oil and gas leases or interests therein  
3 covering tracts of land lying within the Contract Area which are owned by the parties to this agreement.

4 N. The term "Plug Back" shall mean a single operation whereby a deeper Zone is abandoned in order to attempt a  
5 Completion in a shallower Zone.

6 O. The term "Recompletion" or "Recomplete" shall mean an operation whereby a Completion in one Zone is abandoned  
7 in order to attempt a Completion in a different Zone within the existing wellbore.

8 P. The term "Rework" shall mean an operation conducted in the wellbore of a well after it is Completed to secure,  
9 restore, or improve production in a Zone which is currently open to production in the wellbore. Such operations include, but  
10 are not limited to, well stimulation operations but exclude any routine repair or maintenance work or drilling, Sidetracking,  
11 Deepening, Completing, Recompleting, or Plugging Back of a well.

12 Q. The term "Sidetrack" shall mean the directional control and intentional deviation of a well from vertical so as to  
13 change the bottom hole location unless done to straighten the hole or drill around junk in the hole to overcome other  
14 mechanical difficulties.

15 R. The term "Zone" shall mean a stratum of earth containing or thought to contain a common accumulation of Oil and  
16 Gas separately producible from any other common accumulation of Oil and Gas.

17 Unless the context otherwise clearly indicates, words used in the singular include the plural, the word "person" includes  
18 natural and artificial persons, the plural includes the singular, and any gender includes the masculine, feminine, and neuter.

## 19 ARTICLE II.

### 20 EXHIBITS

21 The following exhibits, as indicated below and attached hereto, are incorporated in and made a part hereof:

22   x   A. Exhibit "A," shall include the following information:

- 23 (1) Description of lands subject to this agreement,  
24 (2) Restrictions, if any, as to depths, formations, or substances,  
25 (3) Parties to agreement with addresses and telephone numbers for notice purposes,  
26 (4) Percentages or fractional interests of parties to this agreement,  
27 (5) Oil and Gas Leases and/or Oil and Gas Interests subject to this agreement,  
28 (6) Burdens on production. (7) Plat of Contract Area

29   x   B. Exhibit "B," Form of Lease.

30   x   C. Exhibit "C," Accounting Procedure.

31   x   D. Exhibit "D," Insurance.

32   x   E. Exhibit "E," Gas Balancing Agreement.

33   x   F. Exhibit "F," Non-Discrimination and Certification of Non-Segregated Facilities.

34   x   G. Exhibit "G," Recording Supplement to Operating Agreement and Financing Statement.

35 If any provision of any exhibit, except Exhibits "E," "F" and "G," is inconsistent with any provision contained in  
36 the body of this agreement, the provisions in the body of this agreement shall prevail.

## 37 ARTICLE III.

### INTERESTS OF PARTIES

#### A. Oil and Gas Interests:

or acquires

If any party owns / an Oil and Gas Interest in the Contract Area, that Interest shall be treated for all purposes of this  
agreement and during the term hereof as if it were covered by the form of Oil and Gas Lease attached hereto as Exhibit "B,"  
and the owner thereof shall be deemed to own both royalty interest in such lease and the interest of the lessee thereunder.

#### B. Interests of Parties in Costs and Production:

Unless changed by other provisions, all costs and liabilities incurred in operations under this agreement shall be borne  
and paid, and all equipment and materials acquired in operations on the Contract Area shall be owned, by the parties as their



interests are set forth in Exhibit "A." In the same manner, the parties shall also own all production of Oil and Gas from the Contract Area subject, however, to the payment of royalties and other burdens on production as described hereafter.

Regardless of which party has contributed any Oil and Gas Lease or Oil and Gas Interest on which royalty or other burdens shall be payable by Operator, and Operator shall pay or deliver, or cause to be paid or delivered, all burdens on production from the Contract Area, provided Non-Operator elects to market its Oil and Gas with Operator under Operator's standard marketing letter agreement if Non-Operator elects to take its Gas in kind and separately market, then it shall bear and pay its proportionate share of all royalties and Operator shall have no obligation to distribute such burdens on behalf of Non-Operator.

. If any party has contributed hereto any Lease or

Interest which is burdened with any royalty, overriding royalty, production payment or other burden on production in excess of the amounts stipulated above, such party so burdened shall assume and alone bear all such excess obligations and shall indemnify, defend and hold the other parties hereto harmless from any and all claims attributable to such excess burden. However, so long as the Drilling Unit for the productive Zone(s) is identical with the Contract Area, each party shall pay or deliver, or cause to be paid or delivered, all burdens on production from the Contract Area due under the terms of the Oil and Gas Lease(s) which such party has contributed to this agreement, and shall indemnify, defend and hold the other parties free from any liability therefore.

No party shall ever be responsible, on a price basis higher than the price received by such party, to any other party's lessor or royalty owner, and if such other party's lessor or royalty owner should demand and receive settlement on a higher price basis, the party contributing the affected Lease shall bear the additional royalty burden attributable to such higher price.

Nothing contained in this Article III.B. shall be deemed an assignment or cross-assignment of interests covered hereby, and in the event two or more parties contribute to this agreement jointly owned Leases, the parties' undivided interests in said Leaseholds shall be deemed separate leasehold interests for the purposes of this agreement.

#### C. Subsequently Created Interests:

If any party has contributed hereto a Lease or Interest that is burdened with an assignment of production given as security for the payment of money, or if, after the date of this agreement, any party creates an overriding royalty, production payment, net profits interest, assignment of production or other burden payable out of production attributable to its working interest hereunder, such burden shall be deemed a "Subsequently Created Interest." Further, if any party has contributed hereto a Lease or Interest burdened with an overriding royalty, production payment, net profits interests, or other burden payable out of production created prior to the date of this agreement, and such burden is not shown on Exhibit "A," such burden also shall be deemed a Subsequently Created Interest to the extent such burden causes the burdens on such party's Lease or Interest to exceed the amount stipulated in Article III.B. above.

The party whose interest is burdened with the Subsequently Created Interest (the "Burdened Party") shall assume and alone bear, pay and discharge the Subsequently Created Interest and shall indemnify, defend and hold harmless the other parties from and against any liability therefor. Further, if the Burdened Party fails to pay, when due, its share of expenses chargeable hereunder, all provisions of Article VII.B. shall be enforceable against the Subsequently Created Interest in the same manner as they are enforceable against the working interest of the Burdened Party. If the Burdened Party is required under this agreement to assign or relinquish to any other party, or parties, all or a portion of its working interest and/or the production attributable thereto, said other party, or parties, shall receive said assignment and/or production free and clear of said Subsequently Created Interest, and the Burdened Party shall indemnify, defend and hold harmless said other party, or parties, from any and all claims and demands for payment asserted by owners of the Subsequently Created Interest.

### ARTICLE IV.

#### TITLES

##### A. Title Examination:

Completed on the Drillsite tract and on all tracts in the well bore path in the Drilling Unit unless otherwise agreed upon by the parties.

Title examination shall be / made on the Drillsite of any proposed well prior to commencement of drilling operations / and, if a majority in interest of the Drilling Parties so request or Operator so elects, title examination shall be made on the entire Drilling Unit, or maximum anticipated Drilling Unit, of the well. The opinion will include the ownership of the working interest, minerals, royalty, overriding royalty and production payments under the applicable Leases. Each party contributing Leases and/or Oil and Gas Interests to be included in the Drillsite or Drilling Unit, if appropriate, shall furnish to Operator

all abstracts (including federal lease status reports), title opinions, title papers and curative material in its possession free of charge. All such information not in the possession of or made available to Operator by the parties, but necessary for the examination of the title, shall be obtained by Operator. Operator shall cause title to be examined by attorneys on its staff or by outside attorneys. Copies of all title opinions shall be furnished to each Drilling Party. Costs incurred by Operator in procuring abstracts, fees paid title agents and attorneys for title examination (including preliminary, supplemental, shut-in royalty opinions and division order title opinions) and other direct charges as provided in Exhibit "C" shall be borne by the Drilling Parties in the proportion that the interest of each Drilling Party bears to the total interest of all Drilling Parties as such interests appear in Exhibit "A." Operator shall make no charge for services rendered by its staff attorneys or other personnel in the performance of the above functions.

~~Each party~~ Operator shall be responsible for securing curative matter and pooling amendments or agreements required in connection with Leases or Oil and Gas Interests contributed by ~~such~~ each party. Operator shall be responsible for the preparation and recording of pooling designations or declarations and communitization agreements as well as the conduct of hearings before governmental agencies for the securing of spacing or pooling orders or any other orders necessary or appropriate to the conduct of operations hereunder. This shall not prevent any party from appearing on its own behalf at such hearings. Costs incurred by Operator, including fees paid to attorneys, which are associated with hearings before governmental agencies, and which costs are necessary and proper for the activities contemplated under this agreement, shall be direct charges to the joint account and shall not be covered by the administrative overhead charges as provided in Exhibit "C." Operator shall make no charge for services rendered by its staff attorneys or other personnel in the performance of the above functions.

No well shall be drilled on the Contract Area until after (1) the title to the Drillsite or Drilling Unit, if appropriate, has been examined as above provided, and (2) the title has been approved by the examining attorney or title has been accepted by all of the Drilling Parties in such well.

#### **B. Loss or Failure of Title:**

1. Failure of Title: Should any Oil and Gas Interest or Oil and Gas Lease be lost through failure of title, which results in a reduction of interest from that shown on Exhibit "A," the party credited with contributing the affected Lease or Interest (including, if applicable, a successor in interest to such party) shall have ninety (90) days from final determination of title failure to acquire a new lease or other instrument curing the entirety of the title failure, which acquisition will not be subject to Article VIII.B., and failing to do so, this agreement, nevertheless, shall continue in force as to all remaining Oil and Gas Leases and Interests; and,

(a) The party credited with contributing the Oil and Gas Lease or Interest affected by the title failure (including, if applicable, a successor in interest to such party) shall bear alone the entire loss and it shall not be entitled to recover from Operator or the other parties any development or operating costs which it may have previously paid or incurred, but there shall be no additional liability on its part to the other parties hereto by reason of such title failure;

(b) There shall be no retroactive adjustment of expenses incurred or revenues received from the operation of the Lease or Interest which has failed, but the interests of the parties contained on Exhibit "A" shall be revised on an acreage basis, as of the time it is determined finally that title failure has occurred, so that the interest of the party whose Lease or Interest is affected by the title failure will thereafter be reduced in the Contract Area by the amount of the Lease or Interest failed;

(c) If the proportionate interest of the other parties hereto in any producing well previously drilled on the Contract Area is increased by reason of the title failure, the party who bore the costs incurred in connection with such well attributable to the Lease or Interest which has failed shall receive the proceeds attributable to the increase in such interest (less costs and burdens attributable thereto) until it has been reimbursed for unrecovered costs paid by it in connection with such well attributable to such failed Lease or Interest;

(d) Should any person not a party to this agreement, who is determined to be the owner of any Lease or Interest which has failed, pay in any manner any part of the cost of operation, development, or equipment, such amount shall be paid to the party or parties who bore the costs which are so refunded;

(e) Any liability to account to a person not a party to this agreement for prior production of Oil and Gas which arises by reason of title failure shall be borne severally by each party (including a predecessor to a current party) who received

1 production for which such accounting is required based on the amount of such production received, and each such party shall  
 2 severally indemnify, defend and hold harmless all other parties hereto for any such liability to account;

3 (f) No charge shall be made to the joint account for legal expenses, fees or salaries in connection with the defense of  
 4 the Lease or Interest claimed to have failed, but if the party contributing such Lease or Interest hereto elects to defend its title  
 5 it shall bear all expenses in connection therewith; and

6 (g) If any party is given credit on Exhibit "A" to a Lease or Interest which is limited solely to ownership of an  
 7 interest in the wellbore of any well or wells and the production therefrom, such party's absence of interest in the remainder  
 8 of the Contract Area shall be considered a Failure of Title as to such remaining Contract Area unless that absence of interest  
 9 is reflected on Exhibit "A."

10 2. Loss by Non-Payment or Erroneous Payment of Amount Due: If, through mistake or oversight, any rental, shut-in well  
 11 payment, minimum royalty or royalty payment, or other payment necessary to maintain all or a portion of an Oil and Gas  
 12 Lease or interest is not paid or is erroneously paid, and as a result a Lease or Interest terminates, there shall be no monetary  
 13 liability against the party who failed to make such payment. Unless the party who failed to make the required payment  
 14 secures a new Lease or Interest covering the same interest within ninety (90) days from the discovery of the failure to make  
 15 proper payment, which acquisition will not be subject to Article VIII.B., the interests of the parties reflected on Exhibit "A"  
 16 shall be revised on an acreage basis, effective as of the date of termination of the Lease or Interest involved, and the party  
 17 who failed to make proper payment will no longer be credited with an interest in the Contract Area on account of ownership  
 18 of the Lease or Interest which has terminated. If the party who failed to make the required payment shall not have been fully  
 19 reimbursed, at the time of the loss, from the proceeds of the sale of Oil and Gas attributable to the lost Lease or Interest,  
 20 calculated on an acreage basis, for the development and operating costs previously paid on account of such Lease or Interest,  
 21 it shall be reimbursed for unrecovered actual costs previously paid by it (but not for its share of the cost of any dry hole  
 22 previously drilled or wells previously abandoned) from so much of the following as is necessary to effect reimbursement:

23 (a) Proceeds of Oil and Gas produced prior to termination of the Lease or Interest, less operating expenses and lease  
 24 burdens chargeable hereunder to the person who failed to make payment, previously accrued to the credit of the lost Lease or  
 25 Interest, on an acreage basis, up to the amount of unrecovered costs;

26 (b) Proceeds of Oil and Gas, less operating expenses and lease burdens chargeable hereunder to the person who failed  
 27 to make payment, up to the amount of unrecovered costs attributable to that portion of Oil and Gas thereafter produced and  
 28 marketed (excluding production from any wells thereafter drilled) which, in the absence of such Lease or Interest termination,  
 29 would be attributable to the lost Lease or Interest on an acreage basis and which as a result of such Lease or Interest  
 30 termination is credited to other parties, the proceeds of said portion of the Oil and Gas to be contributed by the other parties  
 31 in proportion to their respective interests reflected on Exhibit "A"; and,

32 (c) Any monies, up to the amount of unrecovered costs that may be paid by any party who is, or becomes, the owner  
 33 of the Lease or Interest lost, for the privilege of participating in the Contract Area or becoming a party to this agreement.

34 3. Other Losses: All losses of Leases or Interests committed to this agreement, other than those set forth in Articles  
 35 IV.B.1. and IV.B.2. above, shall be joint losses and shall be borne by all parties in proportion to their interests shown on  
 36 Exhibit "A." This shall include but not be limited to the loss of any Lease or Interest through failure to develop or because  
 37 express or implied covenants have not been performed (other than performance which requires only the payment of money),  
 and the loss of any Lease by expiration at the end of its primary term if it is not renewed or extended. There shall be no  
 readjustment of interests in the remaining portion of the Contract Area on account of any joint loss.

4. Curing Title: In the event of a Failure of Title under Article IV.B.1. or a loss of title under Article IV.B.2. above, any  
 Lease or Interest acquired by any party hereto (other than the party whose interest has failed or was lost) during the ninety  
 (90) day period provided by Article IV.B.1. and Article IV.B.2. above covering all or a portion of the interest that has failed  
 or was lost shall be offered at cost to the party whose interest has failed or was lost, and the provisions of Article VIII.B.  
 shall not apply to such acquisition.



## ARTICLE V.

## OPERATOR

## A. Designation and Responsibilities of Operator:

Chesapeake Appalachia, L.L.C. shall be the Operator of the Contract Area, and shall conduct and direct and have full control of all operations on the Contract Area as permitted and required by, and within the limits of this agreement. In its performance of services hereunder for the Non-Operators, Operator shall be an independent contractor not subject to the control or direction of the Non-Operators except as to the type of operation to be undertaken in accordance with the election procedures contained in this agreement. Operator shall not be deemed, or hold itself out as, the agent of the Non-Operators with authority to bind them to any obligation or liability assumed or incurred by Operator as to any third party. Operator shall conduct its activities under this agreement as a reasonable prudent operator, in a good and workmanlike manner, with due diligence and dispatch, in accordance with good oilfield practice, and in compliance with applicable law and regulation, but in no event shall it have any liability as Operator to the other parties for losses sustained or liabilities incurred except such as may result from gross negligence or willful misconduct.

## B. Resignation or Removal of Operator and Selection of Successor:

1. Resignation or Removal of Operator. Operator may resign at any time by giving written notice thereof to Non-Operators. If Operator terminates its legal existence, no longer owns an interest hereunder in the Contract Area, or is no longer capable of serving as Operator, Operator shall be deemed to have resigned without any action by Non-Operators, except the selection of a successor. Operator may be removed only for good cause by the affirmative vote of Non-Operators owning a majority interest based on ownership as shown on Exhibit "A" remaining after excluding the voting interest of Operator; such vote shall not be deemed effective until a written notice has been delivered to the Operator by a Non-Operator detailing the alleged default and Operator has failed to cure the default within thirty (30) days from its receipt of the notice or, if the default concerns an operation then being conducted, within forty-eight (48) hours of its receipt of the notice. For purposes hereof, "good cause" shall mean not only gross negligence or willful misconduct but also the material breach of or inability to meet the standards of operation contained in Article V.A. or material failure or inability to perform its obligations under this agreement.

Subject to Article VII.D.1., such resignation or removal shall not become effective until 7:00 o'clock A.M. on the first day of the calendar month following the expiration of ninety (90) days after the giving of notice of resignation by Operator or action by the Non-Operators to remove Operator, unless a successor Operator has been selected and assumes the duties of Operator at an earlier date. Operator, after effective date of resignation or removal, shall be bound by the terms hereof as a Non-Operator. A change of a corporate name or structure of Operator or transfer of all of Operator's interest (including ownership) to any single Failure of Operator to provide proof, reasonably satisfactory to Non-Operator(s), of the proposed entity's financial subsidiary, parent or successor corporation shall not be the basis for removal of Operator. / capability to conduct operations shall entitle Non-Operator(s) to prevent said transfer.

2. Selection of Successor Operator. Upon the resignation or removal of Operator under any provision of this agreement, a successor Operator shall be selected by the parties. The successor Operator shall be selected from the parties owning an interest in the Contract Area at the time such successor Operator is selected. The successor Operator shall be selected by the affirmative vote of two (2) or more parties owning a majority interest based on ownership as shown on Exhibit "A"; provided, however, if an Operator which has been removed or is deemed to have resigned fails to vote or votes only to succeed itself, the successor Operator shall be selected by the affirmative vote of the party or parties owning a majority interest based on ownership as shown on Exhibit "A" remaining after excluding the voting interest of the Operator that was removed or resigned. The former Operator shall promptly deliver to the successor Operator all records and data relating to the operations conducted by the former Operator to the extent such records and data are not already in the possession of the successor operator. Any cost of obtaining or copying the former Operator's records and data shall be charged to the joint account.

3. Effect of Bankruptcy. If Operator becomes insolvent, bankrupt or is placed in receivership, it shall be deemed to have resigned without any action by Non-Operators, except the selection of a successor. If a petition for relief under the federal bankruptcy laws is filed by or against Operator, and the removal of Operator is prevented by the federal bankruptcy court, all Non-Operators and Operator shall comprise an interim operating committee to serve until Operator has elected to reject or assume this agreement pursuant to the Bankruptcy Code, and an election to reject this agreement by Operator as a debtor in possession, or by a trustee in bankruptcy, shall be deemed a resignation as Operator without any action by Non-Operators, except the selection of a successor. During the period of time the operating committee controls operations, all actions shall



1 require the approval of two (2) or more parties owning a majority interest based on ownership as shown on Exhibit "A." In  
 2 the event there are only two (2) parties to this agreement, during the period of time the operating committee controls  
 3 operations, a third party acceptable to Operator, Non-Operator and the federal bankruptcy court shall be selected as a  
 4 member of the operating committee, and all actions shall require the approval of two (2) members of the operating  
 5 committee without regard for their interest in the Contract Area based on Exhibit "A."

6 **C. Employees and Contractors:**

7 The number of employees or contractors used by Operator in conducting operations hereunder, their selection, and the  
 8 hours of labor and the compensation for services performed shall be determined by Operator, and all such employees or  
 9 contractors shall be the employees or contractors of Operator.

10 **D. Rights and Duties of Operator:**

11 1. Competitive Rates and Use of Affiliates: All wells drilled on the Contract Area shall be drilled on a competitive  
 12 contract basis at the usual rates prevailing in the area. If it so desires, Operator may employ its own tools and equipment, in conducting  
 13 operations hereunder but its charges therefor shall not exceed the prevailing rates in the area and the rate

14 of such charges shall be, and such work shall be performed by  
 15 Operator under the same terms and conditions as are customary and usual in the area in contracts of independent contractors  
 16 who are doing work of a similar nature. All work performed or materials supplied by affiliates or related parties of Operator  
 17 shall be performed or supplied at competitive rates, pursuant to written agreement, and in accordance with customs and  
 18 standards prevailing in the industry.

19 2. Discharge of Joint Account Obligations: Except as herein otherwise specifically provided, Operator shall promptly pay  
 20 and discharge expenses incurred in the development and operation of the Contract Area pursuant to this agreement and shall  
 21 charge each of the parties hereto with their respective proportionate shares upon the expense basis provided in Exhibit "C."  
 22 Operator shall keep an accurate record of the joint account hereunder, showing expenses incurred and charges and credits  
 23 made and received.

24 3. Protection from Liens: Operator shall pay, or cause to be paid, as and when they become due and payable, all accounts of  
 25 contractors and suppliers and wages and salaries for services rendered or performed, and for materials supplied on, to or in respect of the  
 26 Contract Area or any operations for the joint account thereof, and shall keep the Contract Area free from

27 liens and encumbrances resulting therefrom except for those resulting from a bona fide dispute as to services rendered or  
 28 materials supplied.

29 4. Custody of Funds: Operator shall hold for the account of the Non-Operators any funds of the Non-Operators advanced  
 30 or paid to the Operator, either for the conduct of operations hereunder or as a result of the sale of production from the  
 31 Contract Area, and such funds shall remain the funds of the Non-Operators on whose account they are advanced or paid until  
 32 used for their intended purpose or otherwise delivered to the Non-Operators or applied toward the payment of debts as  
 33 provided in Article VII.B. Nothing in this paragraph shall be construed to establish a fiduciary relationship between Operator  
 34 and Non-Operators for any purpose other than to account for Non-Operator funds as herein specifically provided. Nothing in  
 35 this paragraph shall require the maintenance by Operator of separate accounts for the funds of Non-Operators unless the  
 36 parties otherwise specifically agree.

37 5. Access to Contract Area and Records: Operator shall, except as otherwise provided herein, permit each Non-Operator  
 or its duly authorized representative, at the Non-Operator's sole risk and cost, full and free access at all reasonable times to  
 all operations of every kind and character being conducted for the joint account on the Contract Area and to the records of  
 operations conducted thereon or production therefrom, including Operator's books and records relating thereto. Such access  
 rights shall not be exercised in a manner interfering with Operator's conduct of an operation hereunder and shall not obligate  
 Operator to furnish any geologic or geophysical data of an interpretive nature unless the cost of preparation of such  
 interpretive data was charged to the joint account. Operator will furnish to each Non-Operator upon request copies of any  
 and all reports and information obtained by Operator in connection with production and related items, including, without  
 limitation, meter and chart reports, production purchaser statements, run tickets and monthly gauge reports, but excluding  
 purchase contracts and pricing information to the extent not applicable to the production of the Non-Operator seeking the

information. Any audit of Operator's records relating to amounts expended and the appropriateness of such expenditures shall be conducted in accordance with the audit protocol specified in Exhibit "C."

6. Filing and Furnishing Governmental Reports: Operator will file, and upon written request promptly furnish copies to each requesting Non-Operator not in default of its payment obligations, all operational notices, reports or applications required to be filed by local, State, Federal or Indian agencies or authorities having jurisdiction over operations hereunder. Each Non-Operator shall provide to Operator on a timely basis all information necessary to Operator to make such filings.

7. Drilling and Testing Operations: The following provisions shall apply to each well drilled hereunder, including but not limited to the Initial Well:

(a) Operator will promptly advise / ~~Non-Operators~~ **Consenting Party** of the date on which the well is spudded, or the date on which drilling operations are commenced.

(b) Operator will send to / ~~Non-Operators~~ **Consenting Party** all such reports, test results and notices regarding the progress of operations on the well

including, but not limited to, daily drilling reports, completion reports, and well logs. **Consenting Party will provide Operator a distribution list of data to be sent, in the form of a well requirement sheet**

(c) Operator shall adequately test all Zones encountered which may reasonably be expected to be capable of producing Oil and Gas in paying quantities as a result of examination of the electric log or any other logs or cores or tests conducted hereunder.

8. Cost Estimates: Upon request of any Consenting Party, Operator shall furnish estimates of current and cumulative costs incurred for the joint account at reasonable intervals during the conduct of any operation pursuant to this agreement. Operator shall not be held liable for errors in such estimates so long as the estimates are made in good faith. **This provision is made expressly subject to Article XVI.P, below.**

9. Insurance: At all times while operations are conducted hereunder, Operator shall comply with the workers compensation law of the state where the operations are being conducted; provided, however, that Operator may be a self-insurer for liability under said compensation laws in which event the only charge that shall be made to the joint account shall be as provided in Exhibit "C." Operator shall also carry or provide insurance for the benefit of the joint account of the parties as outlined in Exhibit "D" attached hereto and made a part hereof. Operator shall require all contractors engaged in work on or for the Contract Area to comply with the workers compensation law of the state where the operations are being conducted and to maintain such other insurance as Operator may require.

In the event automobile liability insurance is specified in said Exhibit "D," or subsequently receives the approval of the parties, no direct charge shall be made by Operator for premiums paid for such insurance for Operator's automotive equipment.

## ARTICLE VI.

### DRILLING AND DEVELOPMENT

#### Operations in the Contract Area:

1. Proposed Operations: If any party hereto should desire to drill any well on the Contract Area or if any party should desire to Rework, Sidetrack, Deepen, Recomplete or Plug Back a dry hole or a well no longer capable of producing in paying quantities in which such party has not otherwise relinquished its interest in the proposed objective Zone under this agreement, the party desiring to drill, Rework, Sidetrack, Deepen, Recomplete or Plug Back such a well shall give written notice of the proposed operation to the parties who have not otherwise relinquished their interest in such objective Zone

under this agreement and to all other parties in the case of a proposal for Sidetracking or Deepening, specifying the work to be performed, the location, proposed depth, objective Zone and the estimated cost of the operation. The parties to whom such a notice is delivered shall have thirty (30) days after receipt of the notice within which to notify the party proposing to do the work whether they elect to participate in the cost of the proposed operation. If a drilling rig is on location, notice of a proposal to Rework, Sidetrack, Recomplete, Plug Back or Deepen may be given by telephone and the response period shall be limited to forty-eight (48) hours, exclusive of Saturday, Sunday and legal holidays. Failure of a party to whom such notice is delivered to reply within the period above fixed shall constitute an election by that party not to participate in the cost of the proposed operation.

1 Any proposal by a party to conduct an operation conflicting with the operation initially proposed shall be delivered to all parties  
2 within the time and in the manner provided in Article VI.B.6.

3 If all parties to whom such notice is delivered elect to participate in such a proposed operation, the parties shall be  
4 contractually committed to participate therein provided such operations are commenced within the time period hereafter set  
5 forth, and Operator shall, no later than ninety (90) days after expiration of the notice period of thirty (30) days (or as  
6 promptly as practicable after the expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case  
7 may be), actually commence the proposed operation and thereafter complete it with due diligence at the risk and expense of  
8 the parties participating therein; provided, however, said commencement date may be extended upon written notice of same  
9 by Operator to the other parties, for a period of up to thirty (30) additional days if, in the sole opinion of Operator, such  
10 additional time is reasonably necessary to obtain permits from governmental authorities, surface rights (including rights-of-  
11 way) or appropriate drilling equipment, or to complete title examination or curative matter required for title approval or  
12 acceptance. If the actual operation has not been commenced within the time provided (including any extension thereof as  
13 specifically permitted herein or in the force majeure provisions of Article XI) and if any party hereto still desires to conduct  
14 said operation, written notice proposing same must be resubmitted to the other parties in accordance herewith as if no prior  
15 proposal had been made. Those parties that did not participate in the drilling of a well for which a proposal to Deepen or  
16 Sidetrack is made hereunder shall, if such parties desire to participate in the proposed Deepening or Sidetracking operation,  
17 reimburse the Drilling Parties in accordance with Article VI.B.4. in the event of a Deepening operation and in accordance  
18 with Article VI.B.5. in the event of a Sidetracking operation.

15 2. Operations by Less Than All Parties:

to Rework, Sidetrack, Deepen, Recomplete or Plug Back

16 (a) Determination of Participation. If any party to whom such notice / is delivered as provided in Article VI.B.1. or  
17 VI.C.1. (Option No. 2) elects not to participate in the proposed operation, then, in order to be entitled to the benefits of this  
18 Article, the party or parties giving the notice and such other parties as shall elect to participate in the operation shall, no  
19 later than ninety (90) days after the expiration of the notice period of thirty (30) days (or as promptly as practicable after the  
20 expiration of the forty-eight (48) hour period when a drilling rig is on location, as the case may be) actually commence the  
21 proposed operation and complete it with due diligence. Operator shall perform all work for the account of the Consenting  
22 Parties; provided, however, if no drilling rig or other equipment is on location, and if Operator is a Non-Consenting Party,  
23 the Consenting Parties shall either: (i) request Operator to perform the work required by such proposed operation for the  
24 account of the Consenting Parties, or (ii) designate one of the Consenting Parties as Operator to perform such work. The  
25 rights and duties granted to and imposed upon the Operator under this agreement are granted to and imposed upon the party  
26 designated as Operator for an operation in which the original Operator is a Non-Consenting Party. Consenting Parties, when  
27 conducting operations on the Contract Area pursuant to this Article VI.B.2., shall comply with all terms and conditions of this  
28 agreement.

26 If less than all parties approve any proposed operation, the proposing party, immediately after the expiration of the  
27 applicable notice period, shall advise all Parties of the total interest of the parties approving such operation and its  
28 recommendation as to whether the Consenting Parties should proceed with the operation as proposed. Each Consenting Party,  
29 within forty-eight (48) hours (exclusive of Saturday, Sunday, and legal holidays) after delivery of such notice, shall advise the  
30 proposing party of its desire to (i) limit participation to such party's interest as shown on Exhibit "A" or (ii) carry only its  
31 proportionate part (determined by dividing such party's interest in the Contract Area by the interests of all Consenting Parties in  
32 the Contract Area) of Non-Consenting Parties' interests, or (iii) carry its proportionate part (determined as provided in (ii)) of  
33 Non-Consenting Parties' interests together with all or a portion of its proportionate part of any Non-Consenting Parties'  
34 interests that any Consenting Party did not elect to take. Any interest of Non-Consenting Parties that is not carried by a  
35 Consenting Party shall be deemed to be carried by the party proposing the operation if such party does not withdraw its  
36 proposal. Failure to advise the proposing party within the time required shall be deemed an election under (i). In the event a  
37 drilling rig is on location, notice may be given by telephone, and the time permitted for such a response shall not exceed a  
total of forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays). The proposing party, at its election, may  
withdraw such proposal if there is less than 100% participation and shall notify all parties of such decision within ten (10)  
days, or within twenty-four (24) hours if a drilling rig is on location, following expiration of the applicable response period.



1 If 100% subscription to the proposed operation is obtained, the proposing party shall promptly notify the Consenting Parties  
 2 of their proportionate interests in the operation and the party serving as Operator shall commence such operation within the  
 3 period provided in Article VI.B.1., subject to the same extension right as provided therein.

4 (b) Relinquishment of Interest for Non-Participation. The entire cost and risk of conducting such operations shall be  
 5 borne by the Consenting Parties in the proportions they have elected to bear same under the terms of the preceding  
 6 paragraph. Consenting Parties shall keep the leasehold estates involved in such operations free and clear of all liens and  
 7 encumbrances of every kind created by or arising from the operations of the Consenting Parties. If such an operation results  
 8 in a dry hole, then subject to Articles VI.B.6. and VI.E.3., the Consenting Parties shall plug and abandon the well and restore  
 9 the surface location at their sole cost, risk and expense; provided, however, that those Non-Consenting Parties that  
 10 participated in the drilling, Deepening or Sidetracking of the well shall remain liable for, and shall pay, their proportionate  
 11 shares of the cost of plugging and abandoning the well and restoring the surface location insofar only as those costs were not  
 12 increased by the subsequent operations of the Consenting Parties. If any well drilled, Reworked, Sidetracked, Deepened,  
 13 Recompleted or Plugged Back under the provisions of this Article results in a well capable of producing Oil and/or Gas in  
 14 paying quantities, the Consenting Parties shall Complete and equip the well to produce at their sole cost and risk, and the  
 15 well shall then be turned over to Operator (if the Operator did not conduct the operation) and shall be operated by it at the  
 16 expense and for the account of the Consenting Parties. Upon commencement of operations for the drilling, Reworking,  
 17 Sidetracking, ReCompleting, Deepening or Plugging Back of any such well by Consenting Parties in accordance with the  
 18 provisions of this Article, each Non-Consenting Party shall be deemed to have relinquished to Consenting Parties, and the  
 19 Consenting Parties shall own and be entitled to receive, in proportion to their respective interests, all of such Non-  
 20 Consenting Party's interest in the well and share of production therefrom or, in the case of a Reworking, Sidetracking,

21 Deepening, ReCompleting or Plugging Back, or a Completion pursuant to Article VI.C.1. Option No. 2, all of such Non-  
 22 Consenting Party's interest in the production obtained from the operation in which the Non-Consenting Party did not elect  
 23 to participate. Such relinquishment shall be effective until the proceeds of the sale of such share, calculated at the well, or  
 24 market value thereof if such share is not sold (after deducting applicable ad valorem, production, severance, and excise taxes,  
 25 royalty, overriding royalty and other interests not excepted by Article III.C. payable out of or measured by the production  
 26 from such well accruing with respect to such interest until it reverts), shall equal the total of the following:

27 (i) 200 % of each such Non-Consenting Party's share of the cost of any newly acquired surface equipment  
 28 beyond the wellhead connections (including but not limited to stock tanks, separators, treaters, pumping equipment and  
 29 piping), plus 100% of each such Non-Consenting Party's share of the cost of operation of the well commencing with first  
 30 production and continuing until each such Non-Consenting Party's relinquished interest shall revert to it under other  
 31 provisions of this Article, it being agreed that each Non-Consenting Party's share of such costs and equipment will be that  
 32 **proposed well or operation**  
 33 interest which would have been chargeable to such Non-Consenting Party had it participated in the / well from the beginning  
 34 of the operations; and

35 (ii) 400\* % of (a) that portion of the costs and expenses of drilling, Reworking, Sidetracking, Deepening,  
 36 Plugging Back, testing, Completing, and ReCompleting, after deducting any cash contributions received under Article VIII.C.,  
 37 and 400%\* of (b) that portion of the cost of newly acquired equipment in the well (to and including the wellhead connections),  
 38 which would have been chargeable to such Non-Consenting Party if it had participated therein. **If the well to be drilled is the initial well**  
 39 **in the Drilling Unit, the penalties in this subparagraph (ii) shall be 600/600% in lieu of 400/400%.**

40 Notwithstanding anything to the contrary in this Article VI.B., if the well does not reach the deepest objective Zone  
 41 described in the notice proposing the well for reasons other than the encountering of granite or practically impenetrable  
 42 substance or other condition in the hole rendering further operations impracticable, Operator shall give notice thereof to each  
 43 Non-Consenting Party who submitted or voted for an alternative proposal under Article VI.B.6. to drill the well to a  
 44 shallower Zone than the deepest objective Zone proposed in the notice under which the well was drilled, and each such Non-  
 45 Consenting Party shall have the option to participate in the initial proposed Completion of the well by paying its share of the  
 46 cost of drilling the well to its actual depth, calculated in the manner provided in Article VI.B.4. (a). If any such Non-  
 47 Consenting Party does not elect to participate in the first Completion proposed for such well, the relinquishment provisions

1 of this Article VI.B.2. (b) shall apply to such party's interest.

2 (c) Reworking, Recompleting or Plugging Back. An election not to participate in the drilling, Sidetracking or  
3 Deepening of a well shall be deemed an election not to participate in any Reworking or Plugging Back operation proposed in  
4 such a well, or portion thereof, to which the initial non-consent election applied that is conducted at any time prior to full  
5 recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Similarly, an election not to  
6 participate in the Completing or Recompleting of a well shall be deemed an election not to participate in any Reworking  
7 operation proposed in such a well, or portion thereof, to which the initial non-consent election applied that is conducted at  
8 any time prior to full recovery by the Consenting Parties of the Non-Consenting Party's recoupment amount. Any such  
9 Reworking, Recompleting or Plugging Back operation conducted during the recoupment period shall be deemed part of the  
10 cost of operation of said well and there shall be added to the sums to be recouped by the Consenting Parties 400% of  
11 that portion of the costs of the Reworking, Recompleting or Plugging Back operation which would have been chargeable to  
12 such Non-Consenting Party had it participated therein. If such a Reworking, Recompleting or Plugging Back operation is  
13 proposed during such recoupment period, the provisions of this Article VI.B. shall be applicable as between said Consenting  
14 Parties in said well.

15 (d) Recoupment Matters. During the period of time Consenting Parties are entitled to receive Non-Consenting Party's  
16 share of production, or the proceeds therefrom, Consenting Parties shall be responsible for the payment of all ad valorem,  
17 production, severance, excise, gathering and other taxes, and all royalty, overriding royalty and other burdens applicable to  
18 Non-Consenting Party's share of production not excepted by Article III.C.

19 In the case of any Reworking, Sidetracking, Plugging Back, Recompleting or Deepening operation, the Consenting  
20 Parties shall be permitted to use, free of cost, all casing, tubing and other equipment in the well, but the ownership of all  
21 such equipment shall remain unchanged; and upon abandonment of a well after such Reworking, Sidetracking, Plugging Back,  
22 Recompleting or Deepening, the Consenting Parties shall account for all such equipment to the owners thereof, with each  
23 party receiving its proportionate part in kind or in value, less cost of salvage.

24 Within ninety (90) days after the completion of any operation under this Article, the party conducting the operations  
25 for the Consenting Parties shall furnish each Non-Consenting Party with an inventory of the equipment in and connected to  
26 the well, and an itemized statement of the cost of drilling, Sidetracking, Deepening, Plugging Back, testing, Completing,  
27 Recompleting, and equipping the well for production; or, at its option, the operating party, in lieu of an itemized statement  
28 of such costs of operation, may submit a detailed statement of monthly billings. Each month thereafter, during the time the  
29 Consenting Parties are being reimbursed as provided above, the party conducting the operations for the Consenting Parties  
30 shall furnish the Non-Consenting Parties with an itemized statement of all costs and liabilities incurred in the operation of  
31 the well, together with a statement of the quantity of Oil and Gas produced from it and the amount of proceeds realized from  
32 the sale of the well's working interest production during the preceding month. In determining the quantity of Oil and Gas  
33 produced during any month, Consenting Parties shall use industry accepted methods such as but not limited to metering or  
34 periodic well tests. Any amount realized from the sale or other disposition of equipment newly acquired in connection with  
35 any such operation which would have been owned by a Non-Consenting Party had it participated therein shall be credited  
36 against the total unreturned costs of the work done and of the equipment purchased in determining when the interest of such  
37 Non-Consenting Party shall revert to it as above provided; and if there is a credit balance, it shall be paid to such Non-  
Consenting Party.

31 If and when the Consenting Parties recover from a Non-Consenting Party's relinquished interest the amounts provided  
32 for above, the relinquished interests of such Non-Consenting Party shall automatically revert to it as of 7:00 a.m. on the day  
33 following the day on which such recoupment occurs, and, from and after such reversion, such Non-Consenting Party shall  
34 own the same interest in such well, the material and equipment in or pertaining thereto, and the production therefrom as  
35 such Non-Consenting Party would have been entitled to had it participated in the drilling, Sidetracking, Reworking,  
36 Deepening, Recompleting or Plugging Back of said well. Thereafter, such Non-Consenting Party shall be charged with and  
37 shall pay its proportionate part of the further costs of the operation of said well in accordance with the terms of this  
agreement and Exhibit "C" attached hereto.

3. Stand-By Costs: When a well which has been drilled or Deepened has reached its authorized depth and all tests have

1 been completed and the results thereof furnished to the parties, or when operations on the well have been otherwise  
2 terminated pursuant to Article VI.F., stand-by costs incurred pending response to a party's notice proposing a Reworking,  
3 Sidetracking, Deepening, Recompleting, Plugging Back or Completing operation in such a well (including the period required  
4 under Article VI.B.6. to resolve competing proposals) shall be charged and borne as part of the drilling or Deepening  
5 operation just completed. Stand-by costs subsequent to all parties responding, or expiration of the response time permitted,  
6 whichever first occurs, and prior to agreement as to the participating interests of all Consenting Parties pursuant to the terms  
7 of the second grammatical paragraph of Article VI.B.2. (a), shall be charged to and borne as part of the proposed operation,  
8 but if the proposal is subsequently withdrawn because of insufficient participation, such stand-by costs shall be allocated  
9 between the Consenting Parties in the proportion each Consenting Party's interest as shown on Exhibit "A" bears to the total  
10 interest as shown on Exhibit "A" of all Consenting Parties.

11 In the event that notice for a Sidetracking operation is given while the drilling rig to be utilized is on location, any party  
12 may request and receive up to five (5) additional days after expiration of the forty-eight hour response period specified in  
13 Article VI.B.1. within which to respond by paying for all stand-by costs and other costs incurred during such extended  
14 response period; Operator may require such party to pay the estimated stand-by time in advance as a condition to extending  
15 the response period. If more than one party elects to take such additional time to respond to the notice, standby costs shall be  
16 allocated between the parties taking additional time to respond on a day-to-day basis in the proportion each electing party's  
17 interest as shown on Exhibit "A" bears to the total interest as shown on Exhibit "A" of all the electing parties.

18 4. Deepening: If less than all parties elect to participate in a drilling, Sidetracking, or Deepening operation proposed  
19 pursuant to Article VI.B.1., the interest relinquished by the Non-Consenting Parties to the Consenting Parties under Article  
20 VI.B.2. shall relate only and be limited to the lesser of (i) the total depth actually drilled or (ii) the objective depth or Zone  
21 of which the parties were given notice under Article VI.B.1. ("Initial Objective"). Such well shall not be Deepened beyond the  
22 Initial Objective without first complying with this Article to afford the Non-Consenting Parties the opportunity to participate  
23 in the Deepening operation.

24 In the event any Consenting Party desires to drill or Deepen a Non-Consent Well to a depth below the Initial Objective,  
25 such party shall give notice thereof, complying with the requirements of Article VI.B.1., to all parties (including Non-  
26 Consenting Parties). Thereupon, Articles VI.B.1. and 2. shall apply and all parties receiving such notice shall have the right to  
27 participate or not participate in the Deepening of such well pursuant to said Articles VI.B.1. and 2. If a Deepening operation  
28 is approved pursuant to such provisions, and if any Non-Consenting Party elects to participate in the Deepening operation,  
29 such Non-Consenting party shall pay or make reimbursement (as the case may be) of the following costs and expenses.

30 (a) If the proposal to Deepen is made prior to the Completion of such well as a well capable of producing in paying  
31 quantities, such Non-Consenting Party shall pay (or reimburse Consenting Parties for, as the case may be) that share of costs  
32 and expenses incurred in connection with the drilling of said well from the surface to the Initial Objective which Non-  
33 Consenting Party would have paid had such Non-Consenting Party agreed to participate therein, plus the Non-Consenting  
34 Party's share of the cost of Deepening and of participating in any further operations on the well in accordance with the other  
35 provisions of this Agreement; provided, however, all costs for testing and Completion or attempted Completion of the well  
36 incurred by Consenting Parties prior to the point of actual operations to Deepen beyond the Initial Objective shall be for the  
37 sole account of Consenting Parties.

38 (b) If the proposal is made for a Non-Consent Well that has been previously Completed as a well capable of producing  
39 in paying quantities, but is no longer capable of producing in paying quantities, such Non-Consenting Party shall pay (or  
40 reimburse Consenting Parties for, as the case may be) its proportionate share of all costs of drilling, Completing, and  
41 equipping said well from the surface to the Initial Objective, calculated in the manner provided in paragraph (a) above, less  
42 those costs recouped by the Consenting Parties from the sale of production from the well. The Non-Consenting Party shall  
43 also pay its proportionate share of all costs of re-entering said well. The Non-Consenting Parties' proportionate part (based  
44 on the percentage of such well Non-Consenting Party would have owned had it previously participated in such Non-Consent  
45 Well) of the costs of salvable materials and equipment remaining in the hole and salvable surface equipment used in  
46 connection with such well shall be determined in accordance with Exhibit "C." If the Consenting Parties have recouped the  
47 cost of drilling, Completing, and equipping the well at the time such Deepening operation is conducted, then a Non-



1 Consenting Party may participate in the Deepening of the well with no payment for costs incurred prior to re-entering the  
2 well for Deepening

3 The foregoing shall not imply a right of any Consenting Party to propose any Deepening for a Non-Consent Well prior  
4 to the drilling of such well to its Initial Objective without the consent of the other Consenting Parties as provided in Article  
5 V.I.F.

6 5. Sidetracking: Any party having the right to participate in a proposed Sidetracking operation that does not own an  
7 interest in the affected wellbore at the time of the notice shall, upon electing to participate, tender to the wellbore owners its  
8 proportionate share (equal to its interest in the Sidetracking operation) of the value of that portion of the existing wellbore  
9 to be utilized as follows:

10 (a) If the proposal is for Sidetracking an existing dry hole, reimbursement shall be on the basis of the actual costs  
11 incurred in the initial drilling of the well down to the depth at which the Sidetracking operation is initiated.

12 (b) If the proposal is for Sidetracking a well which has previously produced, reimbursement shall be on the basis of  
13 such party's proportionate share of drilling and equipping costs incurred in the initial drilling of the well down to the depth  
14 at which the Sidetracking operation is conducted, calculated in the manner described in Article VI.B.4(b) above. Such party's  
15 proportionate share of the cost of the well's salvable materials and equipment down to the depth at which the Sidetracking  
16 operation is initiated shall be determined in accordance with the provisions of Exhibit "C."

17 6. Order of Preference of Operations. Except as otherwise specifically provided in this agreement, if any party desires to  
18 propose the conduct of an operation that conflicts with a proposal that has been made by a party under this Article VI, such  
19 party shall have <sup>thirty (30)</sup> ~~fifteen (15)~~ / days from delivery of the initial proposal, in the case of a proposal to drill a well or to perform  
20 an operation on a well where no drilling rig is on location, or twenty-four (24) hours, exclusive of Saturday, Sunday and legal  
21 holidays, from delivery of the initial proposal, if a drilling rig is on location for the well on which such operation is to be  
22 conducted, to deliver to all parties entitled to participate in the proposed operation such party's alternative proposal, such  
23 alternate proposal to contain the same information required to be included in the initial proposal. Each party receiving such  
24 proposals shall elect by delivery of notice to Operator within five (5) days after expiration of the proposal period, or within  
25 twenty-four (24) hours (exclusive of Saturday, Sunday and legal holidays) if a drilling rig is on location for the well that is the  
26 subject of the proposals, to participate in one of the competing proposals. Any party not electing within the time required  
27 Except as provided for in Article XVI.A, the  
shall be deemed not to have voted. / The proposal receiving the vote of parties owning the largest aggregate percentage  
interest of the parties voting shall have priority over all other competing proposals; in the case of a tie vote, the  
initial proposal shall prevail. Operator shall deliver notice of such result to all parties entitled to participate in the operation  
within five (5) days after expiration of the election period (or within twenty-four (24) hours, exclusive of Saturday, Sunday  
and legal holidays, if a drilling rig is on location). Each party shall then have two (2) days (or twenty-four (24) hours if a rig  
is on location) from receipt of such notice to elect by delivery of notice to Operator to participate in such operation or to  
relinquish interest in the affected well pursuant to the provisions of Article VI.B.2.; failure by a party to deliver notice within  
such period shall be deemed an election not to participate in the prevailing proposal.

28 7. Conformity to Spacing Pattern. Notwithstanding the provisions of this Article VI.B.2., it is agreed that no wells shall be  
29 proposed to be drilled to or Completed in or produced from a Zone from which a well located elsewhere on the Contract  
30 Area is producing, unless such well conforms to the then-existing well spacing pattern for such Zone.

31 8. Paying Wells. No party shall conduct any Reworking, Deepening, Plugging Back, Completion, Recompletion, or  
32 Sidetracking operation under this agreement with respect to any well then capable of producing in paying quantities except  
with the consent of all parties that have not relinquished interests in the well at the time of such operation.

#### C. Completion of Wells; Reworking and Plugging Back:

33 1. Completion: Without the consent of all parties, no well shall be drilled, Deepened or Sidetracked, except any well  
34 drilled, Deepened or Sidetracked pursuant to the provisions of Article VI.B.2. of this agreement. Consent to the drilling,  
Deepening or Sidetracking shall include:

35 For (1) all horizontal wells in the Marcellus Shale formation and (2) all other horizontal wells with respect to  
which Non-Operator does not elect Option No. 2 all

36 ☒ Option No. 1: / All necessary expenditures for the drilling, Deepening or Sidetracking, testing, Completing and  
equipping of the well, including necessary tankage and/or surface facilities.

37 For (1) all vertical wells and (2) all horizontal wells not in the Marcellus Shale formation with  
respect to which Non-Operator elects Option No. 2 contemporaneously with Non-Operator making its initial election to participate  
in a proposed drilling operations, all if applicable Operator shall revise the AFE to reflect Non-Operator's election.

1     ☒ Option No. 2: All / necessary expenditures for the drilling, Deepening or Sidetracking and testing of the well. / When  
2     such well has reached its authorized depth, and all logs, cores and other tests have been completed, and the results  
3     thereof furnished to the parties, Operator shall give immediate notice to the Non-Operators having the right to  
4     or to perform another operation described in Article XVI.A.,  
5     participate in a Completion attempt whether or not Operator recommends attempting to Complete the well; /  
6     the costs of the operation  
7     together with Operator's AFE for Completion-costs / if not previously provided. The parties receiving such notices shall have  
8     forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays) in which to elect by delivery of  
9     notice to Operator to participate in a recommended Completion attempt or to make a Completion proposal with an  
10    accompanying AFE. Operator shall deliver any such Completion proposal, or any Completion proposal conflicting  
11    with Operator's proposal, to the other parties entitled to participate in such Completion in accordance with the  
12    procedures specified in Article VI.B.6. Election to participate in a Completion attempt shall include consent to all  
13    necessary expenditures for the Completing and equipping of such well, including necessary tankage and/or surface  
14    facilities but excluding any stimulation operation not contained on the Completion AFE. Failure of any party  
15    receiving such notice to reply within the period above fixed shall constitute an election by that party not to  
16    participate in the cost of the Completion attempt; provided, that Article VI.B.6. shall control in the case of  
17    conflicting Completion proposals. If one or more, but less than all of the parties, elect to attempt a Completion, the  
18    provision of Article VI.B.2. hereof (the phrase "Reworking, Sidetracking, Deepening, Recompleting or Plugging  
19    Back" as contained in Article VI.B.2. shall be deemed to include "Completing") shall apply to the operations  
20    thereafter conducted by less than all parties; provided, however, that Article VI.B.2. shall apply separately to each  
21    separate Completion or Recompletion attempt undertaken hereunder, and an election to become a Non-Consenting  
22    Party as to one Completion or Recompletion attempt shall not prevent a party from becoming a Consenting Party  
23    in subsequent Completion or Recompletion attempts regardless whether the Consenting Parties as to earlier  
24    Completions or Recompletion have recouped their costs pursuant to Article VI.B.2.; provided further, that any  
25    recoupment of costs by a Consenting Party shall be made solely from the production attributable to the Zone in  
26    which the Completion attempt is made. Election by a previous Non-Consenting party to participate in a subsequent  
27    Completion or Recompletion attempt shall require such party to pay its proportionate share of the cost of salvable  
28    materials and equipment installed in the well pursuant to the previous Completion or Recompletion attempt,  
29    insofar and only insofar as such materials and equipment benefit the Zone in which such party participates in a  
30    Completion attempt.

31    2. Rework, Recomplete or Plug Back: No well shall be Reworked, Recompleted or Plugged Back except a well Reworked,  
32    Recompleted, or Plugged Back pursuant to the provisions of Article VI.B.2. of this agreement. Consent to the Reworking,  
33    Recompleting or Plugging Back of a well shall include all necessary expenditures in conducting such operations and  
34    Completing and equipping of said well, including necessary tankage and/or surface facilities.

#### 35    D. Other Operations:

36    Operator shall not undertake any single project reasonably estimated to require an expenditure in excess of \_\_\_\_\_  
37    Fifty Thousand & No/100 Dollars (\$ 50,000.00 ) except in connection with the  
38    drilling, Sidetracking, Reworking, Deepening, Completing, Recompleting or Plugging Back of a well that has been previously  
39    authorized by or pursuant to this agreement; provided, however, that, in case of explosion, fire, flood or other sudden  
40    emergency, whether of the same or different nature, Operator may take such steps and incur such expenses as in its opinion  
41    are required to deal with the emergency to safeguard life and property but Operator, as promptly as possible, shall report the  
42    emergency to the other parties. If Operator prepares an AFE for its own use, Operator shall furnish any Non-Operator so  
43    requesting an information copy thereof for any single project costing in excess of Fifty Thousand & No/100 Dollars  
44    (\$ 50,000.00 ). Any party who has not relinquished its interest in a well shall have the right to propose that  
45    Operator perform repair work or undertake the installation of artificial lift equipment or ancillary production facilities such as  
46    salt water disposal wells or to conduct additional work with respect to a well drilled hereunder or other similar project (but  
47    not including the installation of gathering lines or other transportation or marketing facilities, the installation of which shall  
48    be governed by separate agreement between the parties) reasonably estimated to require an expenditure in excess of the  
49    amount first set forth above in this Article VI.D. (except in connection with an operation required to be proposed under



Articles VLB.1. or VIC.1. Option No. 2, which shall be governed exclusively by those Articles). Operator shall deliver such proposal to all parties entitled to participate therein. If within thirty (30) days thereof Operator secures the written consent of any party or parties owning at least 50 % of the interests of the parties entitled to participate in such operation, each party having the right to participate in such project shall be bound by the terms of such proposal and shall be obligated to pay its proportionate share of the costs of the proposed project as if it had consented to such project pursuant to the terms of the proposal.

**E. Abandonment of Wells:**

1. Abandonment of Dry Holes: Except for any well drilled or Deepened pursuant to Article VLB.2., any well which has been drilled or Deepened under the terms of this agreement and is proposed to be completed as a dry hole shall not be plugged and abandoned without the consent of all parties. Should Operator, after diligent effort, be unable to contact any party, or should any party fail to reply within forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays) after delivery of notice of the proposal to plug and abandon such well, such party shall be deemed to have consented to the proposed abandonment. All such wells shall be plugged and abandoned in accordance with applicable regulations and at the cost, risk and expense of the parties who participated in the cost of drilling or Deepening such well. Any party who objects to plugging and abandoning such well by notice delivered to Operator within forty-eight (48) hours (exclusive of Saturday, Sunday and legal holidays) after delivery of notice of the proposed plugging shall take over the well as of the end of such forty-eight (48) hour notice period and conduct further operations in search of Oil and/or Gas subject to the provisions of Article VLB.; failure of such party to provide proof reasonably satisfactory to Operator of its financial capability to conduct such operations or to take over the well within such period or thereafter to conduct operations on such well or plug and abandon such well shall entitle Operator to retain or take possession of the well and plug and abandon the well. The party taking over the well shall indemnify Operator (if Operator is an abandoning party) and the other abandoning parties against liability for any further operations conducted on such well except for the costs of plugging and abandoning the well and restoring the surface, for which the abandoning parties shall remain proportionately liable.

2. Abandonment of Wells That Have Produced: Except for any well in which a Non-Consent operation has been conducted hereunder for which the Consenting Parties have not been fully reimbursed as herein provided, any well which has been completed as a producer shall not be plugged and abandoned without the consent of all parties. If all parties consent to such abandonment, the well shall be plugged and abandoned in accordance with applicable regulations and at the cost, risk and expense of all the parties hereto. Failure of a party to reply within sixty (60) days of delivery of notice of proposed abandonment shall be deemed an election to consent to the proposal. If, within sixty (60) days after delivery of notice of the proposed abandonment of any well, all parties do not agree to the abandonment of such well, those wishing to continue its operation from the Zone then open to production shall be obligated to take over the well as of the expiration of the applicable notice period and shall indemnify Operator (if Operator is an abandoning party) and the other abandoning parties against liability for any further operations on the well conducted by such parties. Failure of such party or parties to provide proof reasonably satisfactory to Operator of their financial capability to conduct such operations or to take over the well within the required period or thereafter to conduct operations on such well shall entitle operator to retain or take possession of such well and plug and abandon the well.

Parties taking over a well as provided herein shall tender to each of the other parties its proportionate share of the value of the well's salvageable material and equipment, determined in accordance with the provisions of Exhibit "C," less the estimated cost of salvaging and the estimated cost of plugging and abandoning and restoring the surface; provided, however, that in the event the estimated plugging and abandoning and surface restoration costs and the estimated cost of salvaging are higher than the value of the well's salvageable material and equipment, each of the abandoning parties shall tender to the parties continuing operations their proportionate shares of the estimated excess cost. Each abandoning party shall assign to the non-abandoning parties, without warranty, express or implied, as to title or as to quantity, or fitness for use of the equipment and material, all of its interest in the wellbore of the well and related equipment, together with its interest in the Leasehold insofar and only insofar as such Leasehold covers the right to obtain production from that wellbore in the Zone then open to production. If the interest of the abandoning party is or includes an Oil and Gas Interest, such party shall execute and deliver to the non-abandoning party or parties an oil and gas lease, limited to the wellbore and the Zone then open to production, for a term of

one (1) year and so long thereafter as Oil and/or Gas is produced from the Zone covered thereby, such lease to be on the form attached as Exhibit "B." The assignments or leases so limited shall encompass the Drilling Unit upon which the well is located. The payments by, and the assignments or leases to, the assignees shall be in a ratio based upon the relationship of their respective percentage of participation in the Contract Area to the aggregate of the percentages of participation in the Contract Area of all assignees. There shall be no readjustment of interests in the remaining portions of the Contract Area.

Thereafter, abandoning parties shall have no further responsibility, liability, or interest in the operation of or production from the well in the Zone then open other than the royalties retained in any lease made under the terms of this Article. Upon request, Operator shall continue to operate the assigned well for the account of the non-abandoning parties at the rates and charges contemplated by this agreement, plus any additional cost and charges which may arise as the result of the separate ownership of the assigned well. Upon proposed abandonment of the producing Zone assigned or leased, the assignor or lessor shall then have the option to repurchase its prior interest in the well (using the same valuation formula) and participate in further operations therein subject to the provisions hereof.

3. Abandonment of Non-Consent Operations: The provisions of Article VI.E.1. or VI.E.2. above shall be applicable as between Consenting Parties in the event of the proposed abandonment of any well excepted from said Articles; provided, however, no well shall be permanently plugged and abandoned unless and until all parties having the right to conduct further operations therein have been notified of the proposed abandonment and afforded the opportunity to elect to take over the well in accordance with the provisions of this Article VI.E.; and provided further, that Non-Consenting Parties who own an interest in a portion of the well shall pay their proportionate shares of abandonment and surface restoration cost for such well as provided in Article VI.B.2.(b).

#### F. Termination of Operations:

Upon the commencement of an operation for the drilling, Reworking, Sidetracking, Plugging Back, Deepening, testing, Completion or plugging of a well, including but not limited to the Initial Well, such operation shall not be terminated without consent of parties bearing 50 % of the costs of such operation; provided, however, that in the event granite or other practically impenetrable substance or condition in the hole is encountered which renders further operations impractical, Operator may discontinue operations and give notice of such condition in the manner provided in Article VI.B.1, and the provisions of Article VI.B. or VI.E. shall thereafter apply to such operation, as appropriate.

#### G. Taking Production in Kind:

##### ☒ Option No. 1: Gas Balancing Agreement Attached

Each party ~~shall~~ <sup>may</sup> take in kind or separately dispose of its proportionate share of all Oil and Gas produced from the Contract Area, exclusive of production which may be used in development and producing operations and in preparing and treating Oil and Gas for marketing purposes and production unavoidably lost. Any extra expenditure incurred in the taking in kind or separate disposition by any party of its proportionate share of the production shall be borne by such party. Any party taking its share of production in kind shall be required to pay for only its proportionate share of such part of Operator's surface facilities which it uses.

Each party shall execute such division orders and contracts as may be necessary for the sale of its interest in production from the Contract Area, and, except as provided in Article VII.B., shall be entitled to receive payment directly from the purchaser thereof for its share of all production.

If any party fails to make the arrangements necessary to take in kind or separately dispose of its proportionate share of the Oil produced from the Contract Area, Operator shall have the right, subject to the revocation at will by the party owning it, but not the obligation, to purchase such Oil or sell it to others at any time and from time to time, for the account of the non-taking party. Any such purchase or sale by Operator may be terminated by Operator upon at least ten (10) days written notice to the owner of said production and shall be subject always to the right of the owner of the production upon at least ten (10) days written notice to Operator to exercise at any time its right to take in kind, or separately dispose of, its share of all Oil not previously delivered to a purchaser. Any purchase or sale by Operator of any other party's share of Oil shall be only for such reasonable periods of time as are consistent with the minimum needs of the industry under the particular circumstances, but in no event for a period in excess of one (1) year.

Any such sale by Operator shall be in a manner commercially reasonable under the circumstances but Operator shall have no duty to share any existing market or to obtain a price equal to that received under any existing market. The sale or delivery by Operator of a non-taking party's share of Oil under the terms of any existing contract of Operator shall not give the non-taking party any interest in or make the non-taking party a party to said contract. No purchase shall be made by Operator without first giving the non-taking party at least ten (10) days written notice of such intended purchase and the price to be paid or the pricing basis to be used.

All parties shall give timely written notice to Operator of their Gas marketing arrangements for the following month, excluding price, and shall notify Operator immediately in the event of a change in such arrangements. Operator shall maintain records of all marketing arrangements, and of volumes actually sold or transported, which records shall be made available to Non-Operators upon reasonable request.

In the event one or more parties' separate disposition of its share of the Gas causes split-stream deliveries to separate pipelines and/or deliveries which on a day-to-day basis for any reason are not exactly equal to a party's respective proportionate share of total Gas sales to be allocated to it, the balancing or accounting between the parties shall be in accordance with any Gas balancing agreement between the parties hereto, whether such an agreement is attached as Exhibit "E" or is a separate agreement. Operator shall give notice to all parties of the first sales of Gas from any well under this agreement.

#### EXPENDITURES AND LIABILITY OF PARTIES

##### A. Liability of Parties:

The liability of the parties shall be several, not joint or collective. Each party shall be responsible only for its obligations, and shall be liable only for its proportionate share of the costs of developing and operating the Contract Area. Accordingly, the liens granted among the parties in Article VII.B. are given to secure only the debts of each severally, and no party shall have any liability to third parties hereunder to satisfy the default of any other party in the payment of any expense or obligation hereunder. It is not the intention of the parties to create, nor shall this agreement be construed as creating, a mining or other partnership, joint venture, agency relationship or association, or to render the parties liable as partners, co-venturers, or principals. In their relations with each other under this agreement, the parties shall not be considered fiduciaries or to have established a confidential relationship but rather shall be free to act on an arm's-length basis in accordance with their own respective self-interest, subject, however, to the obligation of the parties to act in good faith in their dealings with each other with respect to activities hereunder.

##### B. Liens and Security Interests:

Each party grants to the other parties hereto a lien upon any interest it now owns or hereafter acquires in Oil and Gas Leases and Oil and Gas Interests in the Contract Area, and a security interest and/or purchase money security interest in any interest it now owns or hereafter acquires in the personal property and fixtures on or used or obtained for use in connection therewith, to secure performance of all of its obligations under this agreement including but not limited to payment of expense, interest and fees, the proper disbursement of all monies paid hereunder, the assignment or relinquishment of interest in Oil and Gas Leases as required hereunder, and the proper performance of operations hereunder. Such lien and security interest granted by each party hereto shall include such party's leasehold interests, working interests, operating rights, and royalty and overriding royalty interests in the Contract Area now owned or hereafter acquired and in lands pooled or unitized therewith or otherwise becoming subject to this agreement, the Oil and Gas when extracted therefrom and equipment situated thereon or used or obtained for use in connection therewith (including, without limitation, all wells, tools, and tubular goods), and accounts (including, without limitation, accounts arising from gas imbalances or from the sale of Oil and/or Gas at the wellhead), contract rights, inventory and general intangibles relating thereto or arising therefrom, and all proceeds and products of the foregoing.

To perfect the lien and security agreement provided herein, each party hereto shall execute and acknowledge the recording supplement and/or any financing statement prepared and submitted by any party hereto in conjunction herewith or at any time following execution hereof, and Operator is authorized to file this agreement or the recording supplement executed herewith as a lien or mortgage in the applicable real estate records and as a financing statement with the proper officer under the Uniform



1 Commercial Code in the state in which the Contract Area is situated and such other states as Operator shall deem appropriate  
2 to perfect the security interest granted hereunder. Any party may file this agreement, the recording supplement executed  
3 herewith, or such other documents as it deems necessary as a lien or mortgage in the applicable real estate records and/or a  
4 financing statement with the proper officer under the Uniform Commercial Code.

5 Each party represents and warrants to the other parties hereto that the lien and security interest granted by such party to  
6 the other parties shall be a first and prior lien, and each party hereby agrees to maintain the priority of said lien and security  
7 interest against all persons acquiring an interest in Oil and Gas Leases and Interests covered by this agreement by, through or  
8 under such party. All parties acquiring an interest in Oil and Gas Leases and Oil and Gas Interests covered by this agreement,  
9 whether by assignment, merger, mortgage, operation of law, or otherwise, shall be deemed to have taken subject  
10 to the lien and security interest granted by this Article VII.B. as to all obligations attributable to such interest hereunder  
11 whether or not such obligations arise before or after such interest is acquired.

12 To the extent that parties have a security interest under the Uniform Commercial Code of the state in which the  
13 Contract Area is situated, they shall be entitled to exercise the rights and remedies of a secured party under the Code.  
14 The bringing of a suit and the obtaining of judgment by a party for the secured indebtedness shall not be deemed an  
15 election of remedies or otherwise affect the lien rights or security interest as security for the payment thereof. In  
16 addition, upon default by any party in the payment of its share of expenses, interests or fees, or upon the improper use  
17 of funds by the Operator, the other parties shall have the right, without prejudice to other rights or remedies, to collect  
18 from the purchaser the proceeds from the sale of such defaulting party's share of Oil and Gas until the amount owed by  
19 such party, plus interest as provided in "Exhibit C," has been received, and shall have the right to offset the amount  
20 owed against the proceeds from the sale of such defaulting party's share of Oil and Gas. All purchasers of production  
21 may rely on a notification of default from the non-defaulting party or parties stating the amount due as a result of the  
22 default, and all parties waive any recourse available against purchasers for releasing production proceeds as provided in  
23 this paragraph.

24 If any party fails to pay its share of cost within one hundred twenty (120) days after rendition of a statement therefore by  
25 Operator, the non-defaulting parties, including Operator, shall upon request by Operator, pay the unpaid amount in the  
26 proportion that the interest of each such party bears to the interest of all such parties. The amount paid by each party so  
27 paying its share of the unpaid amount shall be secured by the liens and security rights described in Article VII.B., and each  
28 paying party may independently pursue any remedy available hereunder or otherwise.

29 If any party does not perform all of its obligations hereunder, and the failure to perform subjects such party to foreclosure  
30 or execution proceedings pursuant to the provisions of this agreement, to the extent allowed by governing law, the defaulting  
31 party waives any available right of redemption from and after the date of judgment, any required valuation or appraisalment  
32 of the mortgaged or secured property prior to sale, any available right to stay execution or to require a marshaling of assets  
33 and any required bond in the event a receiver is appointed. In addition, to the extent permitted by applicable law, each party  
34 hereby grants to the other parties a power of sale as to any property that is subject to the lien and security rights granted  
35 hereunder, such power to be exercised in the manner provided by applicable law or otherwise in a commercially reasonable  
36 manner and upon reasonable notice.

37 Each party agrees that the other parties shall be entitled to utilize the provisions of Oil and Gas lien law or other lien  
law of any state in which the Contract Area is situated to enforce the obligations of each party hereunder. Without limiting  
the generality of the foregoing, to the extent permitted by applicable law, Non-Operators agree that Operator may invoke or  
utilize the mechanics' or materialmen's lien law of the state in which the Contract Area is situated in order to secure the  
payment to Operator of any sum due hereunder for services performed or materials supplied by Operator.

**C. Advances:**

Operator, at its election, shall have the right from time to time to demand and receive from one or more of the other  
parties payment in advance of their respective shares of the estimated amount of the expense to be incurred in operations  
hereunder during the next succeeding month, which right may be exercised only by submission to each such party of an  
itemized statement of such estimated expense, together with an invoice for its share thereof. Each such statement and invoice  
for the payment in advance of estimated expense shall be submitted on or before the 20th day of the next preceding month.

Each party shall pay to Operator its proportionate share of such estimate within fifteen (15) days after such estimate and invoice is received. If any party fails to pay its share of said estimate within said time, the amount due shall bear interest as provided in Exhibit "C" until paid. Proper adjustment shall be made monthly between advances and actual expense to the end that each party shall bear and pay its proportionate share of actual expenses incurred, and no more.

**D. Defaults and Remedies:**

If any party fails to discharge any financial obligation under this agreement, including without limitation the failure to make any advance under the preceding Article VII.C. or any other provision of this agreement, within the period required for such payment hereunder, then in addition to the remedies provided in Article VII.B. or elsewhere in this agreement, the remedies specified below shall be applicable. For purposes of this Article VIL.D., all notices and elections shall be delivered only by Operator, except that Operator shall deliver any such notice and election requested by a non-defaulting Non-Operator, and when Operator is the party in default, the applicable notices and elections can be delivered by any Non-Operator. Election of any one or more of the following remedies shall not preclude the subsequent use of any other remedy specified below or otherwise available to a non-defaulting party.

1. Suspension of Rights: Any party may deliver to the party in default a Notice of Default, which shall specify the default, specify the action to be taken to cure the default, and specify that failure to take such action will result in the exercise of one or more of the remedies provided in this Article. If the default is not cured within thirty (30) days of the delivery of such Notice of Default, all of the rights of the defaulting party granted by this agreement may upon notice be suspended until the default is cured, without prejudice to the right of the non-defaulting party or parties to continue to enforce the obligations of the defaulting party previously accrued or thereafter accruing under this agreement. If Operator is the party in default, the Non-Operators shall have in addition the right, by vote of Non-Operators owning a majority in interest in the Contract Area after excluding the voting interest of Operator, to appoint a new Operator effective immediately. The rights of a defaulting party that may be suspended hereunder at the election of the non-defaulting parties shall include, without limitation, the right to receive information as to any operation conducted hereunder during the period of such default, the right to elect to participate in an operation proposed under Article VI.B. of this agreement, the right to participate in an operation being conducted under this agreement even if the party has previously elected to participate in such operation, and the right to receive proceeds of production from any well subject to this agreement.

2. Suit for Damages: Non-defaulting parties or Operator for the benefit of non-defaulting parties may sue (at joint account expense) to collect the amounts in default, plus interest accruing on the amounts recovered from the date of default until the date of collection at the rate specified in Exhibit "C" attached hereto. Nothing herein shall prevent any party from suing any defaulting party to collect consequential damages accruing to such party as a result of the default.

3. Deemed Non-Consent: The non-defaulting party may deliver a written Notice of Non-Consent Election to the defaulting party at any time after the expiration of the thirty-day cure period following delivery of the Notice of Default, in which event if the billing is for the drilling a new well or the Plugging Back, Sidetracking, Reworking or Deepening of a well which is to be or has been plugged as a dry hole, or for the Completion or Recompletion of any well, the defaulting party will be conclusively deemed to have elected not to participate in the operation and to be a Non-Consenting Party with respect thereto under Article VI.B. or VI.C., as the case may be, to the extent of the costs unpaid by such party, notwithstanding any election to participate theretofore made. If election is made to proceed under this provision, then the non-defaulting parties may not elect to sue for the unpaid amount pursuant to Article VIL.D.2.

Until the delivery of such Notice of Non-Consent Election to the defaulting party, such party shall have the right to cure its default by paying its unpaid share of costs plus interest at the rate set forth in Exhibit "C," provided, however, such payment shall not prejudice the rights of the non-defaulting parties to pursue remedies for damages incurred by the non-defaulting parties as a result of the default. Any interest relinquished pursuant to this Article VIL.D.3. shall be offered to the non-defaulting parties in proportion to their interests, and the non-defaulting parties electing to participate in the ownership of such interest shall be required to contribute their shares of the defaulted amount upon their election to participate therein.

4. Advance Payment: If a default is not cured within thirty (30) days of the delivery of a Notice of Default, Operator, or Non-Operators if Operator is the defaulting party, may thereafter require advance payment from the defaulting party of such defaulting party's anticipated share of any item of expense for which Operator, or Non-Operators, as the case may

be, would be entitled to reimbursement under any provision of this agreement, whether or not such expense was the subject of the previous default. Such right includes, but is not limited to, the right to require advance payment for the estimated costs of drilling a well or Completion of a well as to which an election to participate in drilling or Completion has been made. If the defaulting party fails to pay the required advance payment, the non-defaulting parties may pursue any of the remedies provided in the Article VIII.D. or any other default remedy provided elsewhere in this agreement. Any excess of funds advanced remaining when the operation is completed and all costs have been paid shall be promptly returned to the advancing party.

5. Costs and Attorneys' Fees: In the event any party is required to bring legal proceedings to enforce any financial obligation of a party hereunder, the prevailing party in such action shall be entitled to recover all court costs, costs of collection, and a reasonable attorney's fee, which the lien provided for herein shall also secure.

#### **E. Rentals, Shut-in Well Payments and Minimum Royalties:**

Rentals, shut-in well payments and minimum royalties which may be required under the terms of any lease shall be paid by the party or parties who subjected such lease to this agreement at its or their expense. In the event two or more parties own and have contributed interests in the same lease to this agreement, such parties may designate one of such parties to make said payments for and on behalf of all such parties. Any party may request, and shall be entitled to receive, proper evidence of all such payments. In the event of failure to make proper payment of any rental, shut-in well payment or minimum royalty through mistake or oversight where such payment is required to continue the lease in force, any loss which results from such non-payment shall be borne in accordance with the provisions of Article IV.B.2.

Operator shall notify Non-Operators of the anticipated completion of a shut-in well, or the shutting in or return to production of a producing well, at least five (5) days (excluding Saturday, Sunday, and legal holidays) prior to taking such action, or at the earliest opportunity permitted by circumstances, but assumes no liability for failure to do so. In the event of failure by Operator to so notify Non-Operators, the loss of any lease contributed hereto by Non-Operators for failure to make timely payments of any shut-in well payment shall be borne jointly by the parties hereto under the provisions of Article IV.B.3.

#### **F. Taxes:**

Beginning with the first calendar year after the effective date hereof, Operator shall render for ad valorem taxation all property subject to this agreement which by law should be rendered for such taxes, and it shall pay all such taxes assessed thereon before they become delinquent. Prior to the rendition date, each Non-Operator shall furnish Operator information as to burdens (to include, but not be limited to, royalties, overriding royalties and production payments) on Leases and Oil and Gas Interests contributed by such Non-Operator. If the assessed valuation of any Lease is reduced by reason of its being subject to outstanding excess royalties, overriding royalties or production payments, the reduction in ad valorem taxes resulting therefrom shall inure to the benefit of the owner or owners of such Lease, and Operator shall adjust the charge to such owner or owners so as to reflect the benefit of such reduction. If the ad valorem taxes are based in whole or in part upon separate valuations of each party's working interest, then notwithstanding anything to the contrary herein, charges to the joint account shall be made and paid by the parties hereto in accordance with the tax value generated by each party's working interest. Operator shall bill the other parties for their proportionate shares of all tax payments in the manner provided in Exhibit "C."

If Operator considers any tax assessment improper, Operator may, at its discretion, protest within the time and manner prescribed by law, and prosecute the protest to a final determination, unless all parties agree to abandon the protest prior to final determination. During the pendency of administrative or judicial proceedings, Operator may elect to pay, under protest, all such taxes and any interest and penalty. When any such protested assessment shall have been finally determined, Operator shall pay the tax for the joint account, together with any interest and penalty accrued, and the total cost shall then be assessed against the parties, and be paid by them, as provided in Exhibit "C."

Each party shall pay or cause to be paid all production, severance, excise, gathering and other taxes imposed upon or with respect to the production or handling of such party's share of Oil and Gas produced under the terms of this agreement.

### **ARTICLE VIII.**

#### **ACQUISITION, MAINTENANCE OR TRANSFER OF INTEREST**

##### **A. Surrender of Leases:**



1 The Leases covered by this agreement, insofar as they embrace acreage in the Contract Area, shall not be surrendered in whole  
2 or in part unless all parties consent thereto.

3 However, should any party desire to surrender its interest in any Lease or in any portion thereof, such party shall give written  
4 notice of the proposed surrender to all parties, and the parties to whom such notice is delivered shall have thirty (30) days after  
5 delivery of the notice within which to notify the party proposing the surrender whether they elect to consent thereto. Failure of a  
6 party to whom such notice is delivered to reply within said 30-day period shall constitute a consent to the surrender of the Leases  
7 described in the notice. If all parties do not agree or consent thereto, the party desiring to surrender shall assign, without express or  
8 implied warranty of title, all of its interest in such Lease, or portion thereof, and any well, material and equipment which may be  
9 located thereon and any rights in production thereafter secured, to the parties not consenting to such surrender. If the interest of the  
10 assigning party is or includes an Oil and Gas Interest, the assigning party shall execute and deliver to the party or parties not  
11 consenting to such surrender an oil and gas lease covering such Oil and Gas Interest for a term of one (1) year and so long  
12 thereafter as Oil and/or Gas is produced from the land covered thereby, such lease to be on the form attached hereto as Exhibit "B."  
13 Upon such assignment or lease, the assigning party shall be relieved from all obligations thereafter accruing, but not theretofore  
14 accrued, with respect to the interest assigned or leased and the operation of any well attributable thereto, and the assigning party  
15 shall have no further interest in the assigned or leased premises and its equipment and production other than the royalties retained  
16 in any lease made under the terms of this Article. The party assignee or lessee shall pay to the party assignor or lessor the  
17 reasonable salvage value of the latter's interest in any well's salvable materials and equipment attributable to the assigned or leased  
18 acreage. The value of all salvable materials and equipment shall be determined in accordance with the provisions of Exhibit "C," less  
19 the estimated cost of salvaging and the estimated cost of plugging and abandoning and restoring the surface. If such value is less  
20 than such costs, then the party assignor or lessor shall pay to the party assignee or lessee the amount of such deficit. If the  
21 assignment or lease is in favor of more than one party, the interest shall be shared by such parties in the proportions that the  
22 interest of each bears to the total interest of all such parties. If the interest of the parties to whom the assignment is to be made  
23 varies according to depth, then the interest assigned shall similarly reflect such variances.

24 Any assignment, lease or surrender made under this provision shall not reduce or change the assignor's, lessor's or surrendering  
25 party's interest as it was immediately before the assignment, lease or surrender in the balance of the Contract Area; and the acreage  
26 assigned, leased or surrendered, and subsequent operations thereon, shall not thereafter be subject to the terms and provisions of this  
27 agreement but shall be deemed subject to an Operating Agreement in the form of this agreement.

#### 28 **B. Renewal or Extension of Leases:**

29 If any party secures a renewal or replacement of an Oil and Gas Lease or Interest subject to this agreement, then all other parties  
30 shall be notified promptly upon such acquisition or, in the case of a replacement Lease taken before expiration of an existing Lease,  
31 promptly upon expiration of the existing Lease. The parties notified shall have the right for a period of thirty (30) days following  
32 delivery of such notice in which to elect to participate in the ownership of the renewal or replacement Lease, insofar as such Lease  
33 affects lands within the Contract Area, by paying to the party who acquired it their proportionate shares of the acquisition cost  
34 allocated to that part of such Lease within the Contract Area, which shall be in proportion to the interest held at that time by the  
35 parties in the Contract Area. Each party who participates in the purchase of a renewal or replacement Lease shall be given an  
36 assignment of its proportionate interest therein by the acquiring party.

37 If some, but less than all, of the parties elect to participate in the purchase of a renewal or replacement Lease, it shall be owned  
38 by the parties who elect to participate therein, in a ratio based upon the relationship of their respective percentage of participation in  
39 the Contract Area to the aggregate of the percentages of participation in the Contract Area of all parties participating in the  
40 purchase of such renewal or replacement Lease. The acquisition of a renewal or replacement Lease by any or all of the parties hereto  
41 shall not cause a readjustment of the interests of the parties stated in Exhibit "A," but any renewal or replacement Lease in which  
42 less than all parties elect to participate shall not be subject to this agreement but shall be deemed subject to a separate Operating  
43 Agreement in the form of this agreement.

44 If the interests of the parties in the Contract Area vary according to depth, then their right to participate proportionately in  
45 renewal or replacement Leases and their right to receive an assignment of interest shall also reflect such depth variances.

46 The provisions of this Article shall apply to renewal or replacement Leases whether they are for the entire interest covered by  
47

1 the expiring Lease or cover only a portion of its area or an interest therein. Any renewal or replacement Lease taken before the  
2 expiration of its predecessor Lease, or taken or contracted for or becoming effective within six (6) months after the expiration of the  
3 existing Lease, shall be subject to this provision so long as this agreement is in effect at the time of such acquisition or at the time  
4 the renewal or replacement Lease becomes effective; but any Lease taken or contracted for more than six (6) months after the  
5 expiration of an existing Lease shall not be deemed a renewal or replacement Lease and shall not be subject to the provisions of this  
6 agreement.

7 The provisions in this Article shall also be applicable to extensions of Oil and Gas Leases.

8 **C. Acreage or Cash Contributions:**

9 While this agreement is in force, if any party contracts for a contribution of cash towards the drilling of a well or any other  
10 operation on the Contract Area, such contribution shall be paid to the party who conducted the drilling or other operation and shall  
11 be applied by it against the cost of such drilling or other operation / . If the contribution be in the form of acreage, the party to whom  
12 the contribution is made shall promptly tender an assignment of the acreage, without warranty of title, to the Drilling Parties in the  
13 proportions said Drilling Parties shared the cost of drilling the well. Such acreage shall become a separate Contract Area and, to the  
14 extent possible, be governed by provisions identical to this agreement. Each party shall promptly notify all other parties of any  
15 acreage or cash contributions it may obtain in support of any well or any other operation on the Contract Area. The above  
16 provisions shall also be applicable to optional rights to earn acreage outside the Contract Area which are in support of well drilled  
17 inside Contract Area.

18 If any party contracts for any consideration relating to disposition of such party's share of substances produced hereunder,  
19 such consideration shall not be deemed a contribution as contemplated in this Article VIII.C.

20 **D. Assignment; Maintenance of Uniform Interest:**

21 Every sale, encumbrance, transfer or other disposition made by any party shall be made expressly subject to this agreement  
22 and shall be made without prejudice to the right of the other parties, and any transferee of an ownership interest in any Oil and  
23 Gas Lease or Interest shall be deemed a party to this agreement as to the interest conveyed from and after the effective date of  
24 the transfer of ownership; provided, however, that the other parties shall not be required to recognize any such sale,  
25 encumbrance, transfer or other disposition for any purpose hereunder until thirty (30) days after they have received a copy of the  
instrument of transfer or other satisfactory evidence thereof in writing from the transferor or transferee. No assignment or other  
disposition of interest by a party shall relieve such party of obligations previously incurred by such party hereunder with respect  
to the interest transferred, including without limitation the obligation of a party to pay all costs attributable to an operation  
conducted hereunder in which such party has agreed to participate prior to making such assignment, and the lien and security  
interest granted by Article VII.B. shall continue to burden the interest transferred to secure payment of any such obligations.

26 If, at any time the interest of any party is divided among and owned by four or more co-owners, Operator, at its discretion,  
27 may require such co-owners to appoint a single trustee or agent with full authority to receive notices, approve expenditures,  
28 receive billings for and approve and pay such party's share of the joint expenses, and to deal generally with, and with power to  
29 bind, the co-owners of such party's interest within the scope of the operations embraced in this agreement; however, all such co-  
30 owners shall have the right to enter into and execute all contracts or agreements for the disposition of their respective shares of  
the Oil and Gas produced from the Contract Area and they shall have the right to receive, separately, payment of the sale  
proceeds thereof.

31 **E. Waiver of Rights to Partition:**

32 If permitted by the laws of the state or states in which the property covered hereby is located, each party hereto owning an  
33 undivided interest in the Contract Area waives any and all rights it may have to partition and have set aside to it in severalty its  
undivided interest therein.

34 **F. Preferential Right to Purchase:**

35 ☒ (Optional; Check if applicable.)

36 From and after the payment of the Farmout Consideration payable unto the parties' Farmout Agreement, dated July 1, 2001, should any  
37 party desire to sell all or any part of its interests under this agreement, or its rights and interests in the Contract  
Area, it shall promptly give written notice to the other parties, with full information concerning its proposed disposition, which  
shall include the name and address of the prospective transferee (who must be ready, willing and able to purchase), the purchase



price, a legal description sufficient to identify the property, and all other terms of the offer. The other parties shall then have an optional prior right, for a period of ten (10) days after the notice is delivered, to purchase for the stated consideration on the same terms and conditions the interest which the other party proposes to sell; and, if this optional right is exercised, the purchasing parties shall share the purchased interest in the proportions that the interest of each bears to the total interest of all purchasing parties. However, there shall be no preferential right to purchase in those cases where any party wishes to mortgage its interests, or to transfer title to its interests to its mortgagee in lieu of or pursuant to foreclosure of a mortgage of its interests, or to dispose of its interests by merger, reorganization, consolidation, or by sale of all or substantially all of its Oil and Gas assets to any party, or by transfer of its interests to a subsidiary or parent company or to a subsidiary of a parent company, or to any company in which such party owns a majority of the stock.

ARTICLE IX.

INTERNAL REVENUE CODE ELECTION

~~If, for federal income tax purposes, this agreement and the operations hereunder are regarded as a partnership, and if the parties have not otherwise agreed to form a tax partnership pursuant to Exhibit "G" or other agreement between them, each party hereby affected elects to be excluded from the application of all of the provisions of Subchapter "K," Chapter 1, Subtitle "A," of the Internal Revenue Code of 1986, as amended ("Code"), as permitted and authorized by Section 761 of the Code and the regulations promulgated thereunder. Operator is authorized and directed to execute on behalf of each party hereby affected such evidence of this election as may be required by the Secretary of the Treasury of the United States or the Federal Internal Revenue Service, including specifically, but not by way of limitation, all of the returns, statements, and the data required by Treasury Regulation §1.761. Should there be any requirement that each party hereby affected give further evidence of this election, each such party shall execute such documents and furnish such other evidence as may be required by the Federal Internal Revenue Service or as may be necessary to evidence this election. No such party shall give any notices or take any other action inconsistent with the election made hereby. If any present or future income tax laws of the state or states in which the Contract Area is located or any future income tax laws of the United States contain provisions similar to those in Subchapter "K," Chapter 1, Subtitle "A," of the Code, under which an election similar to that provided by Section 761 of the Code is permitted, each party hereby affected shall make such election as may be permitted or required by such laws. In making the foregoing election, each such party states that the income derived by such party from operations hereunder can be adequately determined without the computation of partnership taxable income.~~

ARTICLE X.

CLAIMS AND LAWSUITS

Operator may settle any single uninsured third party damage claim or suit arising from operations hereunder if the expenditure does not exceed Fifty Thousand and No/100 Dollars (\$ 50,000.00 ) and if the payment is in complete settlement of such claim or suit. If the amount required for settlement exceeds the above amount, the parties hereto shall assume and take over the further handling of the claim or suit, unless such authority is delegated to Operator. All costs and expenses of handling settling, or otherwise discharging such claim or suit shall be a the joint expense of the parties participating in the operation from which the claim or suit arises. If a claim is made against any party or if any party is sued on account of any matter arising from operations hereunder over which such individual has no control because of the rights given Operator by this agreement, such party shall immediately notify all other parties, and the claim or suit shall be treated as any other claim or suit involving operations **ARTICLE XI.**

FORCE MAJEURE

If any party is rendered unable, wholly or in part, by force majeure to carry out its obligations under this agreement, other than the obligation to indemnify or make money payments or furnish security, that party shall give to all other parties prompt written notice of the force majeure with reasonably full particulars concerning it; thereupon, the obligations of the party giving the notice, so far as they are affected by the force majeure, shall be suspended during, but no longer than, the continuance of the force majeure. The term "force majeure," as here employed, shall mean an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightening, fire, storm, flood or other act of nature, explosion, governmental action, governmental delay, restraint or inaction, unavailability of equipment, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

The affected party shall use all reasonable diligence to remove the force majeure situation as quickly as practicable. The requirement that any force majeure shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or other labor difficulty by the party involved, contrary to its wishes; how all such difficulties shall be handled shall be entirely within the discretion of the party concerned.

ARTICLE XII.

NOTICES

All notices authorized or required between the parties by any of the provisions of this agreement, unless otherwise specifically provided, shall be in writing and delivered in person or by United States mail, courier service, telegram, telex, telecopier or any other form of facsimile, postage or charges prepaid, and addressed to such parties at the addresses listed on Exhibit "A." All telephone or oral notices permitted by this agreement shall be confirmed immediately thereafter by written notice. The originating notice given under any provision hereof shall be deemed delivered only when received by the party to whom such notice is directed, and the time for such party to deliver any notice in response thereto shall run from the date the originating notice is received. "Receipt" for purposes of this agreement with respect to written notice delivered hereunder shall be actual delivery of the notice to the address of the party to be notified specified in accordance with this agreement, or to the telecopy, facsimile or telex machine of such party. The second or any responsive notice shall be deemed delivered when deposited in the United States mail or at the office of the courier or telegraph service, or upon transmittal by telex, telecopy or facsimile, or when personally delivered to the party to be notified, provided, that when response is required within 24 or 48 hours, such response shall be given orally or by telephone, telex, telecopy or other facsimile within such period. Each party shall have the right to change its address at any time, and from time to time, by giving written notice thereof to all other parties. If a party is not available to receive notice orally or by telephone when a party attempts to deliver a notice required to be delivered within 24 or 48 hours, the notice may be delivered in writing by any other method specified herein and shall be deemed delivered in the same manner provided above for any responsive notice.

ARTICLE XIII.

TERM OF AGREEMENT

This agreement shall remain in full force and effect as to the Oil and Gas Leases and/or Oil and Gas Interests subject hereto for the period of time selected below; provided, however, no party hereto shall ever be construed as having any right, title or interest in or to any Lease or Oil and Gas Interest contributed by any other party beyond the term of this agreement.

☐ ~~Option No. 1: So long as any of the Oil and Gas Leases subject to this agreement remain or are continued in force as to any part of the Contract Area, whether by production, extension, renewal or otherwise;~~

☒ Option No. 2: In the event the well described in Article VI.A., or any subsequent well drilled under any provision of this agreement, results in the Completion of a well as a well capable of production of Oil and/or Gas in paying quantities, this agreement shall continue in force so long as any such well is capable of production, and for an additional period of 90 days thereafter; provided, however, if, prior to the expiration of such additional period, one or more of the parties hereto are engaged in drilling, Reworking, Deepening, Sidetracking, Plugging Back, testing or attempting to Complete or Re-complete a well or wells hereunder, this agreement shall continue in force until such operations have been completed and if production results therefrom, this agreement shall continue in force as provided herein. In the event the well described in Article VI.A., or any subsequent well drilled hereunder, results in a dry hole, and no other well is capable of producing Oil and/or Gas from the Contract Area, this agreement shall terminate unless drilling, Deepening, Sidetracking, Completing, Re-completing, Plugging Back or Reworking operations are commenced within 90 days from the date of abandonment of said well. "Abandonment" for such purposes shall mean either (i) a decision by all parties not to conduct any further operations on the well or (ii) the elapse of <sup>90</sup>~~180~~ / days from the conduct of any operations on the well, whichever first occurs.

The termination of this agreement shall not relieve any party hereto from any expense, liability or other obligation or any remedy therefor which has accrued or attached prior to the date of such termination.

Upon termination of this agreement and the satisfaction of all obligations hereunder, in the event a memorandum of this Operating Agreement has been filed of record, Operator is authorized to file of record in all necessary recording offices a notice of termination, and each party hereto agrees to execute such a notice of termination as to Operator's interest, upon request of Operator, if Operator has satisfied all its financial obligations.

## ARTICLE XIV.

## COMPLIANCE WITH LAWS AND REGULATIONS

## A. Laws, Regulations and Orders:

This agreement shall be subject to the applicable laws of the state in which the Contract Area is located, to the valid rules, regulations, and orders of any duly constituted regulatory body of said state; and to all other applicable federal, state, and local laws, ordinances, rules, regulations and orders.

## B. Governing Law:

This agreement and all matters pertaining hereto, including but not limited to matters of performance, non-performance, breach, remedies, procedures, rights, duties, and interpretation or construction, shall be governed and determined by the law of the state in which the Contract Area is located. If the Contract Area is in two or more states, the law of the state of Texas shall govern.

## C. Regulatory Agencies:

Nothing herein contained shall grant, or be construed to grant, Operator the right or authority to waive or release any rights, privileges, or obligations which Non-Operators may have under federal or state laws or under rules, regulations or orders promulgated under such laws in reference to oil, gas and mineral operations, including the location, operation, or production of wells, on tracts offsetting or adjacent to the Contract Area.

With respect to the operations hereunder, Non-Operators agree to release Operator from any and all losses, damages, injuries, claims and causes of action arising out of, incident to or resulting directly or indirectly from Operator's interpretation or application of rules, rulings, regulations or orders of the Department of Energy or Federal Energy Regulatory Commission or predecessor or successor agencies to the extent such interpretation or application was made in good faith and does not constitute gross negligence. Each Non-Operator further agrees to reimburse Operator for such Non-Operator's share of production or any refund, fine, levy or other governmental sanction that Operator may be required to pay as a result of such an incorrect interpretation or application, together with interest and penalties thereon owing by Operator as a result of such incorrect interpretation or application.

## ARTICLE XV.

## MISCELLANEOUS

## A. Execution:

This agreement shall be binding upon each Non-Operator when this agreement or a counterpart thereof has been executed by such Non-Operator and Operator notwithstanding that this agreement is not then or thereafter executed by all of the parties to which it is tendered or which are listed on Exhibit "A" as owning an interest in the Contract Area or which own, in fact, an interest in the Contract Area. Operator may, however, by written notice to all Non-Operators who have become bound by this agreement as aforesaid, given at any time prior to the actual spud date of the Initial Well but in no event later than five days prior to the date specified in Article VI.A. for commencement of the Initial Well, terminate this agreement if Operator in its sole discretion determines that there is insufficient participation to justify commencement of drilling operations. In the event of such a termination by Operator, all further obligations of the parties hereunder shall cease as of such termination. In the event any Non-Operator has advanced or prepaid any share of drilling or other costs hereunder, all sums so advanced shall be returned to such Non-Operator without interest. In the event Operator proceeds with drilling operations for the Initial Well without the execution hereof by all persons listed on Exhibit "A" as having a current working interest in such well, Operator shall indemnify Non-Operators with respect to all costs incurred for the Initial Well which would have been charged to such person under this agreement if such person had executed the same and Operator shall receive all revenues which would have been received by such person under this agreement if such person had executed the same.

## B. Successors and Assigns:

This agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, devisees, legal representatives, successors and assigns, and the terms hereof shall be deemed to run with the Leases or Interests included within the Contract Area.



## 1 C. Counterparts:

2 This instrument may be executed in any number of counterparts, each of which shall be considered an original for all  
3 purposes.

## 4 D. Severability:

5 For the purposes of assuming or rejecting this agreement as an executory contract pursuant to federal bankruptcy laws,  
6 this agreement shall not be severable, but rather must be assumed or rejected in its entirety, and the failure of any party to  
7 this agreement to comply with all of its financial obligations provided herein shall be a material default.

## 8 ARTICLE XVI.

## 9 OTHER PROVISIONS

## 10 A. Well Proposal Requirements and Order of Preference of Operations:

## 11 1. (a) Requirements of Vertical Well Proposal: A proposal for a vertical well operation shall include the following:

- 12 (1) the estimated commencement date;
- 13 (2) the proposed depth;
- 14 (3) the objective formation or formations to be penetrated or tested;
- 15 (4) the Authorized Depth, the surface and bottomhole locations, proposed directional operations; and
- 16 (5) the estimated costs of the operation, including, but not limited to, the estimated costs of drilling, testing, or  
17 abandoning the well, itemization of all tangible and intangible costs. Operator's estimate of Completion costs  
should be included as an informational item.

18 (b) Order of Preference of Operations - Vertical Well: The term "Authorized Depth" is the objective depth  
19 authorized in the AFE for vertical wells. Notwithstanding anything contained herein to the contrary, in the event  
20 that competing proposals are received when a well authorized under the terms of this agreement as a vertical well  
21 has been drilled to the Authorized Depth, and all tests have been completed and the results thereof furnished to the  
22 participating parties, and such parties cannot agree upon the sequence and timing of further operations regarding  
23 said well, the following proposals shall control in order enumerated hereafter:

- 24 (1) a proposal to do additional logging, coring or testing;
- 25 (2) a proposal to attempt to Complete the well at the Authorized Depth in the manner set forth in the  
26 Operator's  
27 AFE for Completion (i.e., in accordance with the casing, stimulation, and other Completion programs set forth  
28 in the AFE);
- 29 (3) a proposal to attempt to Complete the well at the Authorized Depth in a manner different than as set  
30 forth in the Operator's AFE for Completion;
- 31 (4) a proposal to Plug Back and attempt to Complete the well at a depth shallower than the Authorized  
32 Depth, with priority given to objectives in ascending order up the hole;
- (5) a proposal to drill the well to a depth below the Authorized Depth, with priority given to objectives in  
descending order;
- (6) a proposal to Sidetrack the well to a new target objective for a vertical or deviated hole, but not a horizontal  
well or lateral drain hole, with the priority given first in ascending order to targets above the Authorized Depth,  
and then in descending order to targets below the Authorized Depth;
- (7) a proposal to Sidetrack to a horizontal well or lateral drain hole, with priority given to a lateral drain  
hole at the Authorized Depth, and then to objectives in ascending order above the Authorized Depth, and  
then to objectives in descending order below the Authorized Depth; and
- (8) plugging and abandoning the well.

## 33 2. (a) Requirements of Horizontal Well Proposal: A proposal for a horizontal well operation shall include the following:

- 34 (1) the estimated commencement date;
- 35 (2) the proposed depth;
- 36 (3) the objective formation or formations to be penetrated or tested;
- 37 (4) the Authorized Objective, the surface and bottomhole locations, proposed directional operations; and
- (5) the estimated costs of the operation, including, but not limited to, the estimated costs of drilling, testing,  
and Completing or abandoning the well. Operator's estimate of Completion costs should be included as an  
informational item.

(b) Order of Preference of Operations – Horizontal Well: The term “Authorized Objective” is the agreed upon length of the lateral drain hole for the horizontal well(s) as authorized in the AFE. Notwithstanding anything contained herein to the contrary, in the event that competing proposals are received when a well authorized under the terms of this agreement as a horizontal well has been drilled to the Authorized Objective and all tests have been completed and the results thereof furnished to the participating parties, and such parties cannot agree upon the sequence and timing of further operations regarding said well, the following proposals shall control in the order enumerated hereafter:

- (1) a proposal to do additional logging, coring or testing;
- (2) a proposal to attempt to Complete the well at the Authorized Objective in the manner set forth in the Operator’s AFE for Completion (i.e., in accordance with the casing, stimulation, and other Completion programs set forth in the AFE);
- (3) a proposal to attempt to Complete the well at the Authorized Objective in a manner different than as set forth in the Operator’s AFE for Completion;
- (4) a proposal to extend the length of the lateral drain hole for specified number of feet in the direction it is drilling, with a priority given to the shortest additional length proposed by any of the participating parties;
- (5) a proposal to drill a new lateral drain hole in a different direction at the Authorized Objective;
- (6) a proposal to drill a new later drain hole at a different depth, with priority given in ascending order to objectives above the Authorized Objective, and then in descending order to objectives below the Authorized Objective;
- (7) a proposal to Plug Back and attempt to Complete the well at a depth shallower than the Authorized Objective with priority given to the objectives in ascending order up the hole;
- (8) a proposal to Deepen the well below the Authorized Objective;
- (9) a proposal to Sidetrack the well to a new target objective, with priority given first in ascending order to objectives above the Authorized Objective, and then in descending order to objectives below the Authorized Objective; and
- (10) plugging and abandoning the well.

In drilling a horizontal well, the Operator shall have the right at its sole discretion to 1) cease drilling at any time, for any reason, after it has drilled the objective formation and has drilled laterally for a distance which is at least equal to fifty percent (50%) of the length of the total horizontal displacement (displacement from true vertical) proposed in the AFE or 2) continue drilling laterally at any time, for any reason, beyond the total horizontal displacement proposed in the AFE, so long as such lateral does not exceed 25% more than that proposed in the AFE; if in such event the well be deemed to be at its “Authorized Objective” as that term is used in this Agreement.

**B. Gathering Lines/Facilities:**

Notwithstanding anything herein to the contrary, any flow line necessary for the gathering of gas from the Contract Area or any other facility necessary for the operation and development of the Contract Area shall be included as an integral part of any proposed operation made under Article VI.B of this Agreement and an election to participate in such operation shall include participation in these associated facilities. Facility includes, but is not limited to, any battery, separator, compressor, gathering system facility, production storage facility or water handling and disposal facilities located within the Contract Area and specifically applicable to the proposed operation.

**C. Plugging and Abandoning:**

It is understood and agreed that where the terms “plugging and abandoning” or “plugged and abandoned” are used in this agreement such terms shall be deemed to include all costs associated with plugging and abandoning a well including, but not limited to, any costs of remediating contamination and/or surface restoration, to the extent that such remediation and/or surface restoration is required by the lease(s), applicable laws or regulation or by prevailing oil field practices.

**D. Commencement of Operations:**

Notwithstanding anything in Article VI.B. to the contrary, Operator’s election to commence operations prior to or during the Notice Period (forty-eight (48) hours if applicable), will not alter or extend the Notice Period in which a party is required to make an election to participate in the proposed operation, or constitute an election by that party not to participate in the cost of the proposed operation.

**E. Headings:**

The descriptive headings used in this Operating Agreement are for convenience only and will not be deemed to affect the meaning of this Operating Agreement.

**F. Memorandum of Operating Agreement:**

Contemporaneously with the execution of this Agreement, the parties have executed a Memorandum of Operating Agreement substantially in the same form as Exhibit “G” attached hereto, for the purpose of giving notice to the third parties of the existence of this Agreement and of the mortgage lien and security interest created by each party as debtor, to all other parties, as secured parties. Such Memorandum of Operating Agreement shall be recorded by Operator in any county in which the Contract Area is located and/or with the Secretary of State.



## 1 G. Construction:

2 Each party has had the opportunity to contribute to the drafting of this agreement and/or opportunity to have it  
 3 reviewed by its legal counsel; therefore, the parties agree that in the event of a dispute over the meaning or application of  
 4 this agreement, it shall be construed as if drafted equally by the parties and no presumption shall arise favoring or  
 5 disfavoring any party by virtue of the authorship of any provisions of this agreement.

## 6 H. INTEGRATION:

7 In the event the Pennsylvania Department of Environmental Protection ("DEP"), Federal, State or other  
 8 governmental body having jurisdiction orders the integration of interests within a spacing unit, any resulting  
 9 increase or decrease in the working interest of the parties shall be realized on a proportionate basis.

## 10 I. CONFIDENTIALITY:

11 Except as otherwise provided herein, during the term of this agreement no party shall divulge to any third  
 12 party any geophysical data acquired, obtained or developed by the parties hereto involving the Contract Area  
 13 subsequent to the effective date of this agreement, or any drilling information relative to any well or wells drilled as a  
 14 result hereof, other than depth and information customarily publicized, without first obtaining the written consent of  
 15 the other parties to release any such information, which consent shall not be unreasonably withheld; provided,  
 16 however, that (1) such consent shall not be necessary for any party to divulge such information to a party who is the  
 17 record owner of an interest in such a well, but only if such party to whom the information is to be disclosed agrees,  
 18 in writing, to be subject to this provision prior to disclosure, and (2) access to such data shall be made available to a  
 19 party's parent company or its subsidiaries, agents, employees and contractors engaged in the performance of any  
 20 work hereunder. All such information and data shall be treated as strictly confidential. Nothing contained herein  
 21 shall be deemed to prevent disclosure of any such information or data if such disclosure is required by applicable  
 22 laws or rules and regulations of any administrative or governmental agency or entity.

23 After the expiration of this agreement all information, data and/or materials acquired jointly pursuant to  
 24 this agreement shall be independently owned by each party who participated in such Geoscience operation and such  
 25 participating party shall have the right to separately sell, trade or otherwise dispose of such data without the  
 26 obligation to share any remuneration received with the other participating parties.

## 27 J. PROSPECT AREA:

28 i. Shall mean the unique Contract Area covered by the JOA for each Initial Prospect Well and all related  
 29 Subsequent Prospect Wells. For each Initial Prospect Well the corresponding Prospect Area shall be a contiguous  
 30 area in size and configuration as determined by the Operator in consultation with Non-Operator in order to  
 31 accommodate anticipated wells, wellbore paths and wellbore lengths located within the anticipated production unit  
 32 established by the Operator as permitted by the underlying oil and gas leases, as may be amended, or  
 33 allowed/required by Federal, State or other governmental body having jurisdiction, or other means, (the "Drilling  
 34 Unit") but in no event shall the Drilling Unit exceed 1,280 acres without the mutual consent of the Parties. The  
 35 Prospect Area shall not include any portion of any other Prospect Area in effect at the time of the Initial Prospect  
 36 Well proposal without the mutual consent of the Parties, except as otherwise provided for herein. For purposes of  
 37 this Agreement, the Prospect Area, Contract Area, Drilling Unit and Prospect JOA Contract Area shall have the  
 same meaning and be considered one and the same.

38 ii. (A) It is recognized by the Parties that it may be prudent and/or necessary to expand or reduce the size  
 39 of an existing Prospect Area, or include within an existing Prospect Area acreage which was not initially included in  
 40 such existing Prospect Area ("Outside Acreage") and/or acreage from an existing and adjoining Prospect Area. In  
 41 the event an existing Prospect Area is expanded or reduced in size, the working interests of the Parties in proposed  
 42 new wells, wells previously proposed and drilled and all wells drilled subsequent thereto within the modified  
 43 Prospect Area shall not change unless agreed to by the Parties or proportionately reduced by a participating third  
 44 party working interest owner in the Prospect Area. For purposes of the Parties maintaining their same working  
 45 interest throughout the Prospect Area, any Outside Acreage included by the Parties shall be owned in proportions of  
 46 the Parties' initial working interest in the Prospect Area being expanded and all Parties shall be obligated to pay  
 47 their share of acquisition costs to acquire such Outside Acreage. The modified Prospect Area(s) and associated Unit  
 48 boundary(ies) shall be revised to reflect the change in Prospect Area. New Memorandums of Operating Agreement  
 49 and modified Declarations of Pooled Units shall be prepared and filed of record, if necessary. No Outside Acreage  
 50 that would constitute more than 20% of the Prospect Area and be necessary to drill longer or additional horizontal  
 51 lateral shall be included in the Prospect Area and/or Drilling Unit without Non-Operators consent.

52 (B) If, while drilling a horizontal well, it becomes necessary to accommodate a well bore path which may  
 53 extend outside of an existing Prospect Area, Operator shall have the right at its sole discretion to reconfigure such  
 54 Prospect Area in such a way as to encompass acreage necessary for such horizontal well and the corresponding Unit  
 55 and shall provide notice to Non-operator of the revised Prospect Area and corresponding working interests. The  
 56 working interests of the Parties in resulting Prospect Area shall remain unchanged as a result of such  
 57 reconfiguration. Should it be necessary to equalize any additional Prospect Area acreage to accommodate such  
 58 reconfiguration as it relates to existing working interests, then assignments of interests necessary to equalize shall be  
 59 made, and the assignee shall reimburse assignor for actual acquisition costs associated therewith.

60 K. INITIAL PROSPECT WELL:

61 Shall mean the initial well drilled on the Prospect Area.

62 L. GATHERING LINES / FACILITIES:

63 Notwithstanding anything herein to the contrary, any gas gathering line necessary for the gathering or  
 64 transportation of gas from the Contract Area or any other facility necessary for the operation and development of  
 65 the Contract Area shall be proposed in accordance with the method prescribed for under Article VI.B.-Operations of

1 this Agreement. Facility includes, but is not limited to, any battery, separator, compressor stations, gathering system  
or production storage facility.

2 **M. MEDIA/NEWS RELEASES:**

3 No party hereto shall, at any time, issue to the press or other media any news release, concerning the  
4 Contract Area (also referred to herein as "Prospect Area"), without the prior approval of all the other parties hereto,  
which approval shall not be unreasonably withheld. Any request for approval hereunder shall be responded to  
5 within 24 hours if receipt of such request and any failure to timely respond shall be deemed to be an approval. When  
all of the parties have reviewed such material and all parties have approved the issuance of the material, the party  
6 desiring such release shall have the principal responsibility for its issuance. The only other exception to the foregoing  
shall be that in the event of any emergency involving extensive property damage, operations failure, loss of human  
7 life or other clear emergency, the party designated as Operator hereunder is authorized to furnish such minimum,  
strictly factual information as shall be necessary to satisfy the legitimate public interest on the part of the press and  
8 duly constituted authorities, if time does not permit obtaining prior approval by the other parties. Said Operator  
shall thereupon promptly advise parties of the information so furnished. Notwithstanding the foregoing, either party  
9 may issue a media or news release required by applicable laws, rules or regulations, including those of applicable  
stock exchanges.

10 **N. CONFLICTING PROVISIONS:**

11 In the event of a conflict between the provisions of this Article XVI and any other provisions of this  
agreement, the provisions of this Article XVI shall control and prevail.

12 **O. DEFAULTS AND REMEDIES:**

13 Except as expressly provided herein, nothing in this Operating Agreement entitles any person or party  
other than the Operator and Non-Operator to any claim, cause of action, remedy, or right of any kind.

14 **P. AFE OVERRUNS**

15 In the event expenditure against an AFE exceeds, or in Operator's reasonable judgment, are likely to  
exceed, twenty percent (20%) or more of the total AFE prior to finishing the approved operations, the Operator,  
16 shall promptly furnish to Non-Operator a supplemental AFE and a summary description as to the purpose and/or  
cause of the overrun. Upon receipt of a supplemental AFE, Non-Operator may call for partner's meeting by  
17 notifying the Operator with full details of the purpose of the meeting, including a time, place and agenda that meet  
the Operator's reasonable business schedule and do not interfere unreasonably with the Operator's ongoing operations  
under this Agreement.

18 IN WITNESS WHEREOF, this agreement shall be effective as of October 18, 2010.

19 Henry Hood, who has prepared and circulated this form for execution, represents and warrants  
that the form was printed from and, with the exception(s) listed below, is identical to the AAPL Form 610-1989 Model Form  
20 Operating Agreement, as published in computerized form by Forms On-A-Disk, Inc. No changes, alterations, or  
modifications have been made, other than those made by strikethrough and/or insertion and that are clearly recognizable as  
21 changes.

22 **ATTEST OR WITNESS:**

**CHESAPEAKE APPALACHIA, L.L.C.,  
OPERATOR**

By \_\_\_\_\_

Henry J. Hood  
Type or print name

Title Senior Vice President - Land and Legal &  
General Counsel

Date \_\_\_\_\_

Tax ID or S.S. No. 20-3774650

29 **ATTEST OR WITNESS:**

**EPSILON ENERGY USA, INC.,  
NON-OPERATORS**

By \_\_\_\_\_

Zoran Arandjelovic  
Type or print name

Title Executive Chairman, President and CEO

Date 24 May 2011

Tax ID or S.S. No. \_\_\_\_\_

1

2 ATTEST OR WITNESS:

STATOIL USA ONSHORE PROPERTIES INC.,  
NON-OPERATORS

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12 Signature Page to that certain Operating Agreement dated October 18, 2010, between Chesapeake Appalachia, L.L.C., Epsilon Energy USA, Inc., and Statoil  
USA Onshore Properties Inc. covering the Baltzley North Unit.

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By

M. K. Williams

Type or print name

Title Land Manager -- Onshore Gas USA & Mexico

Date

Tax ID or S.S. No. FEIN 26-3666667



## ACKNOWLEDGMENTS

Note: The following forms of acknowledgment are the short forms approved by the Uniform Law on Notarial Acts.

The validity and effect of these forms in any state will depend upon the statutes of that state.

Individual acknowledgment:

State of OKLAHOMA )  
 ) ss.  
 County of OKLAHOMA )

This instrument was acknowledged before me on

May 13, 2011 by Henry J. Hood, Senior Vice President – Land and Legal & General Counsel of Chesapeake Appalachia, L.L.C., a limited liability company.

(Seal, if any)



Title (and Rank)

Land Tech

My commission expires:

1/8/12

Acknowledgment in representative capacity:

Province of )  
~~State of~~ Ontario )  
City of ) ss.  
~~County of~~ Vaughan )

This instrument was acknowledged before me on

May 24, 2011 by Zoran Arandjelovic as ~~Executive Chairman~~, President and CEO of Epsilon Energy USA, Inc.

(Seal, if any)

Title (and Rank)

Notary Public

My commission expires:

n/a

Acknowledgment in representative capacity:

State of \_\_\_\_\_ )  
 ) ss.  
 County of \_\_\_\_\_ )

This instrument was acknowledged before me on

\_\_\_\_\_ by M.K. Williams as Land Manager – Onshore Gas USA & Mexico of Statoil USA Onshore Properties Inc.

(Seal, if any)

Title (and Rank)

My commission expires:

**EXHIBIT "A"**

**ATTACHED TO AND MADE A PART OF THAT CERTAIN OPERATING AGREEMENT  
DATED OCTOBER 18, 2010  
BY AND BETWEEN CHESAPEAKE APPALACHIA, L.L.C., OPERATOR,  
EPSILON ENERGY USA, INC., AS NON-OPERATOR, AND STATOIL USA ONSHORE PROPERTIES  
INC., AS NON-OPERATOR**

**1. DESCRIPTION OF LANDS SUBJECT TO THIS AGREEMENT**

THOSE CERTAIN LEASES AND/OR INTERESTS LOCATED WITHIN THE CONTRACT AREA AS FURTHER DESCRIBED ON EXHIBIT "A-1" (LEASE LISTING) AND AS SHOWN ON THE PLAT OF THE CONTRACT AREA ATTACHED AS EXHIBIT "A-2" HEREOF.

**2. RESTRICTIONS, IF ANY, AS TO DEPTHS, FORMATIONS AND SUBSTANCES**

None

**3. PARTIES TO AGREEMENT WITH ADDRESS AND TELEPHONE NUMBER FOR NOTICE PURPOSES**

Chesapeake Appalachia, L.L.C.  
6100 N. Western Avenue  
P. O. Box 18496  
Oklahoma City, Oklahoma  
Attention: Serena Branch, Land Manager  
Telephone: (405) 935-7952  
Facsimile: (405) 849-7952

Epsilon Energy USA, Inc.  
3343 State Route 3004  
Meshoppen, PA 18630  
Attention: Zoran Arandjelovic – President and CEO  
Telephone: (570) 869-2000 ext. 103  
Facsimile: (570) 869-4444

Statoil USA Onshore Properties Inc.  
2103 CityWest Boulevard, Suite 800  
Houston, TX 77042  
Attention: Mike Williams, Land Manager  
Telephone: (713) 918 – 8200  
Facsimile: (713) 918 – 8290

**4. PERCENTAGES OR FRACTIONAL INTERESTS OF PARTIES TO THIS AGREEMENT****BALTZLEY NORTH UNIT**

<b><u>PARTIES</u></b>	<b><u>WORKING INTEREST</u></b>	
	<b><u>CARRIED TO</u></b>	<b><u>WORKING INTEREST</u></b>
	<b><u>COMPLETION</u></b>	<b><u>AFTER COMPLETION</u></b>
Chesapeake Appalachia, L.L.C.*	40.876769%	29.345274%
Statoil USA Onshore Properties, Inc.*	19.417242%	13.865041%
Epsilon Energy USA, Inc.**	0.000000%	17.083696%
Third Party Interests**	<u>39.705989%</u>	<u>39.705989%</u>
	100.000000%	100.000000%

**5. OIL AND GAS LEASES AND/OR OIL AND GAS INTEREST SUBJECT TO THIS AGREEMENT**

The oil and gas lease or oil and gas interest, or portions thereof, included in the Contract Area and described on Exhibit A-1 attached hereto.

**6. BURDENS ON PRODUCTION**

Lease Royalty 15.433533%\*\*\*

**7. PLAT OF CONTRACT AREA**

See attached preliminary Exhibit A-2 which will be substituted with the final unit plat after the initial well is drilled.

\*The working interests of the Parties above are to be determined in accordance with the terms and conditions of that certain Development Agreement ("DA") by and between the Parties dated November 10, 2008. It is understood by the Parties hereto that in the event additional interest is acquired in the Contract Area and all Parties with a right under the DA do not elect and pay for their proportionate share of said interest, the interests above shall be adjusted to reflect actual interest owned by the Parties in the Contract Area. An interest adjustment shall also occur in the event of participation from unleased mineral interests and/or third parties.

\*\*See Exhibit A-1 for third party information.

\*\*\*Lease burdens reflected are estimates and subject to change upon verification of royalty provisions of non-operated leasehold.



Exhibit "A-1"  
 Attached to and made a part of the Operating Agreement dated October 18, 2010, by and between Chesapeake Appalachia, L.L.C., Operator, Epsilon Energy USA, Inc., as Non-Operator, and Statoil USA Onshore Properties Inc., as Non-Operator  
 Baltzley North Unit  
 Rush Township  
 Susquehanna County, Pennsylvania

CHK/STO 57.5/32.5	LESSOR	LESSEE	LEASE DATE	INSTRUMENT NUMBER	TAX ID NUMBER	TITLE ACRES	NET ACRES IN CONTRACT AREA
1-29559-000	Brett A. Christel Flynn	Chesapeake Appalachia LLC	1/7/2010	201004957	157.00-1-019.00	10.1510	1.310000
1-29570-000	Robert and Arlene G. Blom	Chesapeake Appalachia LLC	9/26/2009	201004863	157.00-1-020.00	21.3400	15.635010
1-271016-000	Lorna G. Hall	Chesapeake Appalachia LLC	3/28/2009	200906705	157.15-1-004.00	2.7400	2.740000
1-255277-000	J. Robert and Betty Hiles	Chesapeake Appalachia LLC	3/3/2008	200811255	157.00-1-015.00	13.0000	13.000000
1-292854-000	John M. and Denise Hilde	Chesapeake Appalachia LLC	12/8/2009	201020407	158.00-1-014.00	62.0000	0.150712
1-247550-000	Wayne P. & Donna L. Martin	Chesapeake Appalachia LLC	11/1/2007	200802809	157.00-1-050.00	23.4200	16.209998
1-289128-000	Clara McGavin	Chesapeake Appalachia LLC	9/29/2009	200917545	157.00-1-041.00	0.5000	0.500000
1-280918-000	Anthony J. and Betty A. Onuska	Chesapeake Appalachia LLC	3/28/2009	200910165	157.00-1-046.00	1.0700	1.070000
1-286222-000	Sandra L. and James D. Rogers	Chesapeake Appalachia LLC	9/7/2008	200817864	157.15-1-022.00	0.9200	0.920000
1-271015-000	Ronald D. & Cathy L. Severs	Chesapeake Appalachia LLC	3/22/2009	200905706	157.15-1-030.00	0.9500	0.950000
1-273840-000	Robert D. and Julie A. Shingler	Chesapeake Appalachia LLC	3/30/2009	200908612	157.15-1-027.00	1.1188	1.118750
1-259349-000	Wayne and Linda Smith	Chesapeake Appalachia LLC	4/28/2008	200814786	157.15-1-028.00	3.8600	3.860000
1-273445-000	Charles E. Warner, Jr.	Chesapeake Appalachia LLC	4/14/2009	200905095	157.00-1-039.00	1.7300	1.730000
1-249046-000	Terry and Kim Wescott	Chesapeake Appalachia LLC	11/27/2007	200805343	157.15-1-001.00	4.4897	4.489700
1-306756-000	Jacob Flister	Chesapeake Appalachia LLC	3/31/2010	201012052	157.15-1-006.00	0.5000	0.500000
1-307028-000	Robert L. JR. and Jamie S. Heft	Chesapeake Appalachia LLC	4/23/2010	201012064	157.00-1-040.00	1.6338	1.633750
1-304364-000	Christopher P. Warner	Chesapeake Appalachia LLC	3-9-2010	201009507	157.15-1-009.00	0.9241	0.924100
1-273227-000	Rodney S. and Stephanie M. Brace	Chesapeake Appalachia LLC	3/31/2009	200907531	157.15-1-012.00	0.8426	0.842600
1-272619-000	William T. Chance	Chesapeake Appalachia LLC	4/6/2009	200907634	157.00-1-100.00	0.2700	0.270000
1-321731-000	Rush United Methodist Church	Chesapeake Appalachia LLC	4/16/2010	201100168	157.15-1-011.00	0.2875	0.287500
	Holly Decker	Southwestern Energy Production Company	9/5/2007	200709857	157.00-1-052.00	80.0000	88.038567
	David L. and Sandra L. Beaumont	Southwestern Energy Production Company	9/24/2009	200917567	157.15-1-013.00	0.4060	0.406000
	Judy Y. Kupsinski	Southwestern Energy Production Company	5/10/2007	200707270	158.00-1-010.00	23.6400	0.347414
Total:							138.394161

CHK 100% (STO Declined)	LESSOR	LESSEE	LEASE DATE	INSTRUMENT NUMBER	TAX ID NUMBER	TITLE ACRES	NET ACRES IN CONTRACT AREA
1-301800-000	Michael and Nicole M. Reschick	Chesapeake Appalachia LLC	1/3/2010	201005317	157.15-1-014.00	0.3000	0.300000
1-301823-000	Francis and Patricia Flynn	Chesapeake Appalachia LLC	1/7/2010	201005724	157.15-1-015.00	0.9800	0.980000
1-313723-000	Alar Family Limited Partnership	Chesapeake Appalachia LLC	7/6/2010	201020876	157.00-1-032.01	0.3300	0.330000
1-313225-000	Old Fellows Hall Association of Rush	Chesapeake Appalachia LLC	4/20/2010	201019871	157.15-1-009.00	0.1800	0.180000
1-302497-000	Robert J. and Mary T. Rudolph	Chesapeake Appalachia LLC	3/30/2010	201019307	157.00-1-060.00	39.3000	0.349668
1-309702-000	Edward P. and Jessica R. Warner	Chesapeake Appalachia LLC	4/10/2010	201016802	157.15-1-010.00	0.4645	0.464500
37-000070-000	William R. and Arlene J. Tonzell	Chesapeake Appalachia LLC	10/16/2010	201102552	157.15-1-023.00	0.3440	0.344400
Total:							2.968568

Epsilon/CHK/STO 50/33.78/16.25	LESSOR	LESSEE	LEASE DATE	INSTRUMENT NUMBER	TAX ID NUMBER	TITLE ACRES	NET ACRES IN CONTRACT AREA
1-297572-000	David Ewan Baltzley	Epsilon Energy USA, Inc.	5/16/2007	200708064	176.00-1-012.00	107.6000	19.615173
1-297594-000	Colin and Diana Burdick	Epsilon Energy USA, Inc.	9/19/2007	200800145	157.00-1-043.00	55.3400	55.340000
1-297539-000	Ronald and Brenda Decker	Epsilon Energy USA, Inc.	1/17/2007	200800774	158.00-1-028.00	439.6500	14.666554
1-297597-000	David C. Jenner	Epsilon Energy USA, Inc.	3/21/2007	200704240	157.00-1-049.01	13.8800	13.880000
1-297597-000	David C. Jenner	Epsilon Energy USA, Inc.	3/21/2007	200704240	157.00-1-105.00	40.3500	1.514034
1-297588-000	Paul A. Jones	Epsilon Energy USA, Inc.	7/17/2007	200709894	157.00-1-042.00	67.7000	50.300265
1-297646-000	Thomas L. and Cynthia L. Moore	Epsilon Energy USA, Inc.	10/31/2007	200801949	157.00-1-062.00	1.7400	8.923076
1-297649-000	Thomas L. and Cynthia L. Moore	Epsilon Energy USA, Inc.	10/31/2007	200801949	157.00-1-030.00	9.3500	0.443710
1-297606-000	Kenneth B. and Janice Pittman	Epsilon Energy USA, Inc.	5/7/2007	200708072	176.00-1-009.00	40.8300	27.331418
1-297664-000	Elmer W. and Karen A. J. Ritchie	Epsilon Energy USA, Inc.	12/5/2007	200802016	157.00-1-102.00	2.0000	1.374015
Total:							184.868765

Third Party Interests (Not Subject to Operating Agreement)						
	LESSEE	LEASE DATE	INSTRUMENT NUMBER	TAX ID NUMBER	TITLE ACRES	NET ACRES IN CONTRACT AREA
				157.00-1-048.01	4.0500	4.050000
Douglas W Brown	Talisman Energy USA Inc.			176.00-1-043.00	11.0300	11.030000
Gordon and Sandra J Jr Krize	Talisman Energy USA Inc.			157.00-1-094.00	11.0800	11.800000
Gordon and Sandra J Jr Krize	Talisman Energy USA Inc.			176.00-1-008.00	33.7100	33.710000
Gordon and Sandra J Jr Krize	Talisman Energy USA Inc.			176.00-1-007.00	26.0000	19.697787
Gordon and Sandra J Jr Krize	Talisman Energy USA Inc.			157.00-1-045.00	46.9200	46.920000
Jamie Olszewski	Talisman Energy USA Inc.			157.15-1-020.00	9.9900	9.990000
Howard E. and Barbara River	Talisman Energy USA Inc.			176.00-1-005.00	51.0000	3.234665
Hugh K and Diane M Rodden	Talisman Energy USA Inc.			157.00-1-047.00	0.3760	0.376000
Hugh K and Diane M Rodden	Talisman Energy USA Inc.			157.00-1-049.00	108.4200	59.634791
Hugh K and Diane M Jr. Rodden	Talisman Energy USA Inc.			157.00-1-048.00	6.0300	1.704465
David M and Kathleen M Yulke	Talisman Energy USA Inc.			176.00-1-004.00	68.7750	4.211620
John Sershen	Talisman Energy USA Inc.			157.15-1-026.00	0.9978	0.997800
Gerald N Daly	Cabot Oil & Gas Corporation			157.15-1-005.00	0.9800	0.980000
Michael E. and Alysne D Kipar	Cabot Oil & Gas Corporation			157.15-1-029.00	1.1700	1.170000
Stephen C. and Norma J Lewis	Cabot Oil & Gas Corporation			157.00-1-033.00	0.3489	0.348900
Leroy and Judy Warriner	Cabot Oil & Gas Corporation			157.00-1-017.00	5.5700	5.570000
Total:						214.836328

Uncontrolled Interests (Not subject to the Operating Agreement)				
	LESSEE	TAX ID NUMBER	TITLE ACRES	NET ACRES IN CONTRACT AREA
	Open Interest	157.00-1-018.00	45.9900	45.990000
	Open Interest	157.15-1-002.00	0.5699	0.569900
	Open Interest	157.15-1-024.00	0.7500	0.750000
	Open Interest	157.15-1-025.00	1.0000	1.000000
	Open Interest	157.15-1-007.00	0.1860	0.186000
	Open Interest	157.15-1-003.00	1.0000	1.000000
	Open Interest	157.00-1-044.00	0.4200	0.420000
	Open Interest	157.15-1-019.00	0.3400	0.340000
	Open Interest	157.00-1-031.00	0.5100	0.365526
Total:				50.825428

Total Leasehold Subject to Operating Agreement:	328.231494
Total Acres in Unit:	641.067822
Total Acres in Contract Area:	591.693248

END OF EXHIBIT "A-1"

Attached to and made a part of the Operating Agreement dated October 18, 2010, by and between Chesapeake Appalachia, L.L.C., Epsilon Energy USA, Inc., and Statoil USA Onshore Properties Inc.

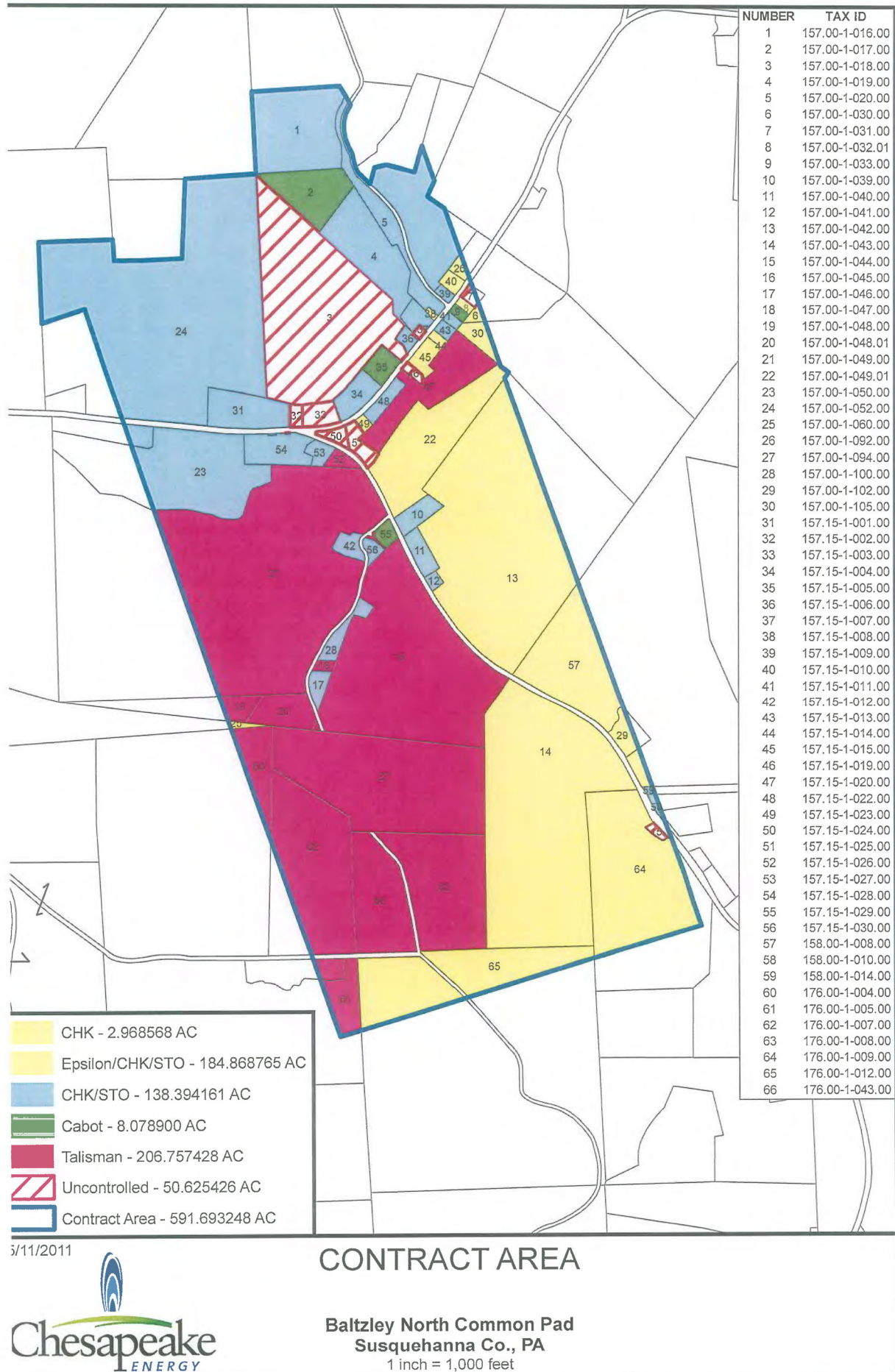




Exhibit "B"

[THIS LEASE IS SUBJECT TO STATE RECORDING LAWS AND MODIFICATIONS TO REFLECT THE TYPE OF INTEREST CONVEYED.]

## FOR THE PURPOSES OF THE COMMONWEALTH OF PENNSYLVANIA

PAID-UP  
OIL & GAS LEASE

Lease No. \_\_\_\_\_

8/08 - PA

This Lease made this \_\_\_\_\_ day of \_\_\_\_\_, 2008, by and between:

hereinafter collectively called "Lessor" hereinafter called "Lessee".

WITNESSETH, that for and in consideration of the premises, and of the mutual covenants and agreements hereinafter set forth, the Lessor and Lessee agree as follows:

**LEASING CLAUSE.** Lessor hereby leases exclusively to Lessee all the oil and gas (including, but not limited to coal seam gas, coalbed methane gas, coalbed gas, methane gas, gob gas, occluded methane/natural gas and all associated natural gas and other hydrocarbons and non-hydrocarbons contained in, associated with, emitting from, or produced/originating within any formation, gob area, mined-out area, coal seam, and all communicating zones), and their liquid or gaseous constituents, whether hydrocarbon or non-hydrocarbon, underlying the land herein leased, together with such exclusive rights as may be necessary or convenient for Lessee, at its election, to explore for, develop, produce, measure, and market production from the Leasehold, and from adjoining lands, using methods and techniques which are not restricted to current technology, including the right to conduct geophysical and other exploratory tests; to drill, maintain, operate, cease to operate, plug, abandon, and remove wells; to use or install roads, electric power and telephone facilities, and to construct pipelines with appurtenant facilities, including data acquisition, compression and collection facilities for use in the production and transportation of products from the Leasehold or from neighboring lands across the Leasehold, to use oil, gas, and non-domestic water sources, free of cost, to store gas of any kind underground, regardless of the source thereof, including the injecting of gas therein and removing the same therefrom; to protect stored gas; to operate, maintain, repair, and remove material and equipment.

**DESCRIPTION.** The Leasehold is located in the Township of \_\_\_\_\_, in the County of \_\_\_\_\_, in the Commonwealth of Pennsylvania, and described as follows:

Property Tax Parcel Identification Number: \_\_\_\_\_

and is bounded formerly or currently as follows:

On the North by lands of \_\_\_\_\_;  
On the East by lands of \_\_\_\_\_;  
On the South by lands of \_\_\_\_\_;  
On the West by lands of \_\_\_\_\_;

including lands acquired from \_\_\_\_\_, by virtue of deed dated \_\_\_\_\_, and recorded in \_\_\_\_\_ Book \_\_\_\_\_, at Page \_\_\_\_\_, and described for the purposes of this agreement as containing a total of \_\_\_\_\_ Leasehold acres, whether actually more or less, and including contiguous lands owned by Lessor. This Lease also covers and includes, in addition to that above described, all land, if any, contiguous or adjacent to or adjoining the land above described and (a) owned or claimed by Lessor, by limitation, prescription, possession, reversion or unrecorded instrument or (b) as to which Lessor has a preference right of acquisition. Lessor agrees to execute any supplemental instrument requested by Lessee for a more complete or accurate description of said land.

**LEASE TERM.** This Lease shall remain in force for a primary term of five (5) years from 12:00 A.M. \_\_\_\_\_ (effective date) to 11:59 P.M. \_\_\_\_\_ (last day of primary term) and shall continue beyond the primary term as to the entirety of the Leasehold if any of the following is satisfied: (i) operations are conducted on the Leasehold or lands pooled/unitized therewith in search of oil, gas, or their constituents, or (ii) a well deemed by Lessee to be capable of production is located on the Leasehold or lands pooled/unitized therewith, or (iii) oil or gas, or their constituents, are produced from the Leasehold or lands pooled/unitized therewith, or (iv) if the Leasehold or lands pooled/unitized therewith is used for the underground storage of gas, or for the protection of stored gas, or (v) if prescribed payments are made, or (vi) if Lessee's operations are delayed, postponed or interrupted as a result of any coal, stone or other mining or mining related operation under any existing and effective lease, permit or authorization covering such operations on the leased premises or on other lands affecting the leased premises, such delay will automatically extend the primary or secondary term of this oil and gas lease without additional compensation or performance by Lessee for a period of time equal to any such delay, postponement or interruption.

If there is any dispute concerning the extension of this Lease beyond the primary term by reason of any of the alternative mechanisms specified herein, the payment to the Lessor of the prescribed payments provided below shall be conclusive evidence that the Lease has been extended beyond the primary term.

**EXTENSION OF PRIMARY TERM.** Lessee has the option to extend the primary term of this Lease for one additional term of five (5) years from the expiration of the primary term of this Lease; said extension to be under the same terms and conditions as contained in this Lease. Lessee may exercise this option to extend this Lease if on or before the expiration date of the primary term of this Lease, Lessee pays or tenders to the Lessor or to the Lessor's credit an amount equal to the initial consideration given for the execution hereof. Exercise of this option is at Lessee's sole discretion and may be invoked by Lessee where no other alternative of the Lease Term clause extends this Lease beyond the primary term.

NO AUTOMATIC TERMINATION OR FORFEITURE.

(A) **CONSTRUCTION OF LEASE:** The language of this Lease (including, but not limited to, the Lease Term and Extension of Term clauses) shall never be read as language of special limitation. This Lease shall be construed against termination, forfeiture, cancellation or expiration and in favor of giving effect to the continuation of this Lease where the circumstances exist to maintain this Lease in effect under any of the alternative mechanisms set forth above. In connection therewith, (i) a well shall be deemed to be capable of production if it has the capacity to produce a profit over operating costs, without regard to any capital costs to drill or equip the well, or to deliver the oil or gas to market, and (ii) the Lessee shall be deemed to be conducting operations in search of oil or gas, or their constituents, if the Lessee is engaged in geophysical and other exploratory work including, but not limited to, activities to drill an initial well, to drill a new well, or to rework, stimulate, deepen, sidetrack, frac, plug back in the same or different formation or repair a well or equipment on the Leasehold or any lands pooled/unitized therewith (such activities shall include, but not be limited to, performing any preliminary or preparatory work necessary for drilling, conducting internal technical analysis to initiate and/or further develop a well, obtaining permits and approvals associated therewith and may include reasonable gaps in activities provided that there is a continuum of activities showing a good faith effort to develop a well or that the cessation or interruption of activities was beyond the control of Lessee, including interruptions caused by the acts of third parties over whom Lessee has no control or regulatory delays associated with any approval process required for conducting such activities).

(B) **LIMITATION OF FORFEITURE:** This Lease shall never be subject to a civil action or proceeding to enforce a claim of termination, cancellation, expiration or forfeiture due to any action or inaction by the Lessee, including, but not limited to making any prescribed payments authorized under the terms of this Lease, unless the Lessee has received written notice of Lessor's demand and thereafter fails or refuses to satisfy or provide justification responding to Lessor's demand within 60 days from the receipt of such notice. If Lessee timely responds to Lessor's demand, but in good faith disagrees with Lessor's position and sets forth the reasons therefore, such a response shall be deemed to satisfy this provision, this Lease shall continue in full force and effect and no further damages (or other claims for relief) will accrue in Lessor's favor during the pendency of the dispute, other than claims for payments that may be due under the terms of this Lease.

**PAYMENTS TO LESSOR.** In addition to the bonus paid by Lessee for the execution hereof, Lessee covenants to pay Lessor, proportionate to Lessor's percentage of ownership, as follows:



(A) **DELAY RENTAL:** To pay Lessor as Delay Rental, after the first year, at the rate of five dollars (\$5.00) per net acre per year payable in advance. **The parties hereto agree that this is a Paid-Up Lease with no further Delay Rental and/or Delay in Marketing payments due to Lessor during the primary term hereof.**

(B) **ROYALTY:** To pay Lessor as Royalty, less all taxes, assessments, and adjustments on production from the Leasehold, as follows:

1. **OIL:** To deliver to the credit of Lessor, free of cost, a Royalty of the equal fifteen percent (15%) part of all oil and any constituents thereof produced and marketed from the Leasehold.

2. **GAS:** To pay Lessor an amount equal to fifteen percent (15%) of the revenue realized by Lessee for all gas and the constituents thereof produced and marketed from the Leasehold, less the cost to transport, treat and process the gas and any losses in volumes to point of measurement that determines the revenue realized by Lessee. Lessee may withhold Royalty payment until such time as the total withheld exceeds fifty dollars (\$50.00).

(C) **DELAY IN MARKETING:** In the event that Lessee drills a well on the Leasehold or lands pooled/unitized therewith that Lessee deems to be capable of production, but does not market producible gas, oil, or their constituents therefrom and there is no other basis for extending this Lease, Lessee shall pay after the primary term and until such time as marketing is established (or Lessee surrenders the Lease) a Delay in Marketing payment equal in amount and frequency to the annual Delay Rental payment, and this Lease shall remain in full force and effect to the same extent as payment of Royalty.

(D) **SHUT-IN:** In the event that production of oil, gas, or their constituents is interrupted and not marketed for a period of twelve months, and there is no producing well on the Leasehold or lands pooled/unitized therewith, Lessee shall thereafter, as Royalty for constructive production, pay a Shut-in Royalty equal in amount and frequency to the annual Delay Rental payment until such time as production is re-established (or Lessee surrenders the Lease) and this Lease shall remain in full force and effect. During Shut-in, Lessee shall have the right to rework, stimulate, or deepen any well on the Leasehold or to drill a new well on the Leasehold in an effort to re-establish production, whether from an original producing formation or from a different formation. In the event that the production from the only producing well on the Leasehold is interrupted for a period of less than twelve months, this Lease shall remain in full force and effect without payment of Royalty or Shut-in Royalty.

(E) **DAMAGES:** Lessee will remove unnecessary equipment and materials and reclaim all disturbed lands at the completion of activities, and Lessee agrees to repair any damaged improvements to the land and pay for the loss of growing crops or marketable timber.

(F) **MANNER OF PAYMENT:** Lessee shall make or tender all payments due hereunder by check, payable to Lessor, at Lessor's last known address, and Lessee may withhold any payment pending notification by Lessor of a change in address. Payment may be tendered by mail or any comparable method (e.g., Federal Express), and payment is deemed complete upon mailing or dispatch. Where the due date for any payment specified herein falls on a holiday, Saturday or Sunday, payment tendered (mailed or dispatched) on the next business day is timely.

(G) **CHANGE IN LAND OWNERSHIP:** Lessee shall not be bound by any change in the ownership of the Leasehold until furnished with such documentation as Lessee may reasonably require. Pending the receipt of documentation, Lessee may elect either to continue to make or withhold payments as if such a change had not occurred.

(H) **TITLE:** If Lessee receives evidence that Lessor does not have title to all or any part of the rights herein leased, Lessee may immediately withhold payments that would be otherwise due and payable hereunder to Lessor until the adverse claim is fully resolved.

(I) **LIENS:** Lessee may at its option pay and discharge any past due taxes, mortgages, judgments, or other liens and encumbrances on or against any land or interest included in the Leasehold; and Lessee shall be entitled to recover from the debtor, with legal interest and costs, by deduction from any future payments to Lessor or by any other lawful means.

(J) **CHARACTERIZATION OF PAYMENTS:** Payments set forth herein are covenants, not special limitations, regardless of the manner in which these payments may be invoked. Any failure on the part of the Lessee to timely or otherwise properly tender payment can never result in an automatic termination, expiration, cancellation, or forfeiture of this Lease. Lessor recognizes and acknowledges that oil and gas lease payments, in the form of rental, bonus and royalty, can vary depending on multiple factors and that this Lease is the product of good faith negotiations. Lessor hereby agrees that the payment terms, as set forth herein, and any bonus payments paid to Lessor constitute full consideration for the Leasehold. Lessor further agrees that such payment terms and bonus payments are final and that Lessor will not seek to amend or modify the lease payments, or seek additional consideration based upon any differing terms which Lessee has or will negotiate with any other lessor/oil and gas owner.

(K) **PAYMENT REDUCTIONS:** If Lessor owns a lesser interest in the oil or gas than the entire undivided fee simple estate, then the rentals (except for Delay Rental payments as set forth above), royalties and shut-in royalties hereunder shall be paid to Lessor only in the proportion which Lessor's interest bears to the whole and undivided fee.

**UNITIZATION AND POOLING.** Lessor grants Lessee the right to pool, unitize, or combine all or parts of the Leasehold with other lands, whether contiguous or not contiguous, leased or unleased, whether owned by Lessee or by others, at a time before or after drilling to create drilling or production units either by contract right or pursuant to governmental authorization. Pooling or unitizing in one or more instances shall not exhaust Lessee's pooling and unitizing rights hereunder, and Lessee is granted the right to change the size, shape, and conditions of operation or payment of any unit created. Lessor agrees to accept and receive out of the production or the revenue realized from the production of such unit, such proportional share of the Royalty from each unit well as the number of Leasehold acres included in the unit bears to the total number of acres in the unit. Otherwise, as to any part of the unit, drilling, operations in preparation for drilling, production, or shut-in production from the unit, or payment of Royalty, Shut-in Royalty, Delay in Marketing payment or Delay Rental attributable to any part of the unit (including non-Leasehold land) shall have the same effect upon the terms of this Lease as if a well were located on, or the subject activity attributable to, the Leasehold. In the event of conflict or inconsistency between the Leasehold acres ascribed to the Lease and the local property tax assessment calculation of the lands covered by the Lease, Lessee may, at its option, rely on the latter as being determinative for the purposes of this paragraph.

**FACILITIES.** Lessee shall not drill a well within 200 feet of any structure located on the Leasehold without Lessor's written consent. Lessor shall not erect any building or structure, or plant any trees within 200 feet of a well or within 25 feet of a pipeline without Lessee's written consent. Lessor shall not improve, modify, degrade, or restrict roads and facilities built by Lessee without Lessee's written consent.

**CONVERSION TO STORAGE.** Lessee is hereby granted the right to convert the Leasehold or lands pooled/unitized therewith to gas storage. At the time of conversion, Lessee shall pay Lessor's proportionate part for the estimated recoverable gas remaining in the well drilled pursuant to this Lease using methods of calculating gas reserves as are generally accepted by the natural gas industry and, in the event that all wells on the Leasehold and/or lands pooled/unitized therewith have permanently ceased production, Lessor shall be paid a Conversion to Storage payment in an amount equal to Delay Rental for as long thereafter as the Leasehold or lands pooled/unitized therewith is/are used for gas storage or for protection of gas storage; such Conversion to Storage payment shall first become due upon the next ensuing Delay Rental anniversary date. The use of any part of the Leasehold or lands pooled or unitized therewith for the underground storage of gas, or for the protection of stored gas will extend this Lease beyond the primary term as to all rights granted by this Lease, including but not limited to production rights, regardless of whether the production and storage rights are owned together or separately.

**TITLE AND INTERESTS.** Lessor hereby warrants generally and agrees to defend title to the Leasehold and covenants that Lessee shall have quiet enjoyment hereunder and shall have benefit of the doctrine of after acquired title. Should any person having title to the Leasehold fail to execute this Lease, the Lease shall nevertheless be binding upon all persons who do execute it as Lessor.

**LEASE DEVELOPMENT.** There is no implied covenant to drill, prevent drainage, further develop or market production within the primary term or any extension of term of this Lease. There shall be no Leasehold forfeiture, termination, expiration or cancellation for failure to comply with said implied covenants. Provisions herein, including, but not limited to the prescribed payments, constitute full compensation for the privileges herein granted.

**COVENANTS.** This Lease and its expressed or implied covenants shall not be subject to termination, forfeiture of rights, or damages due to failure to comply with obligations if compliance is effectively prevented by federal, state, or local law, regulation, or decree, or the acts God and/or third parties over whom Lessee has no control.

**RIGHT OF FIRST REFUSAL.** If at any time within the primary term of this Lease or any continuation or extension thereof, Lessor receives any bona fide offer, acceptable to Lessor, to grant an additional lease ("Top Lease") covering all or part of the Leasehold, Lessee shall have the continuing option by meeting any such offer to acquire a Top Lease on equivalent terms and conditions. Any offer must be in writing and must set forth the proposed Lessee's name, bonus consideration and royalty consideration to be paid for such Top Lease, and include a copy of the lease form to be utilized reflecting all pertinent and relevant terms and conditions of the Top Lease. Lessee shall have fifteen (15) days after receipt from Lessor of a complete copy of any such offer to advise Lessor in writing of its election to enter into an oil and gas lease with Lessor on equivalent terms and conditions. If Lessee fails to notify Lessor within the aforesaid fifteen (15) day period of its election to meet any such bona fide offer, Lessor shall have the right to accept said offer. Any Top Lease granted by Lessor in violation of this provision shall be null and void.

**ARBITRATION.** In the event of a disagreement between Lessor and Lessee concerning this Lease, performance thereunder, or damages



caused by Lessee's operations, the resolution of all such disputes shall be determined by arbitration in accordance with the rules of the American Arbitration Association. All fees and costs associated with the arbitration shall be borne equally by Lessor and Lessee.

ENTIRE CONTRACT. The entire agreement between Lessor and Lessee is embodied herein. No oral warranties, representations, or promises have been made or relied upon by either party as an inducement to or modification of this Lease.

TITLE CURATIVE. Lessor agrees to execute affidavits, ratifications, amendments, permits and other instruments as may be necessary to carry out the purpose of this lease.

SURRENDER. Lessee, at any time, and from time to time, may surrender and cancel this Lease as to all or any part of the Leasehold by recording a Surrender of Lease and thereupon this Lease, and the rights and obligations of the parties hereunder, shall terminate as to the part so surrendered; provided, however, that upon each surrender as to any part of the Leasehold, Lessee shall have reasonable and convenient easements for then existing wells, pipelines, pole lines, roadways and other facilities on the lands surrendered.

SUCCESSORS. All rights, duties, and liabilities herein benefit and bind Lessor and Lessee and their heirs, successors, and assigns.

FORCE MAJEURE. All express or implied covenants of this Lease shall be subject to all applicable laws, rules, regulations and orders. When drilling, reworking, production or other operations hereunder, or Lessee's fulfillment of its obligations hereunder are prevented or delayed by such laws, rules, regulations or orders, or by inability to obtain necessary permits, equipment, services, material, water, electricity, fuel, access or easements, or by fire, flood, adverse weather conditions, war, sabotage, rebellion, insurrection, riot, strike or labor disputes, or by inability to obtain a satisfactory market for production or failure of purchasers or carriers to take or transport such production, or by any other cause not reasonably within Lessee's control, this Lease shall not terminate, in whole or in part, because of such prevention or delay, and, at Lessee's option, the period of such prevention or delay shall be added to the term hereof. Lessee shall not be liable in damages for breach of any express or implied covenants of this Lease for failure to comply therewith, if compliance is prevented by, or failure is the result of any applicable laws, rules, regulations or orders or operation of force majeure.

SEVERABILITY. This Lease is intended to comply with all applicable laws, rules, regulations, ordinances and governmental orders. If any provision of this Lease is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall survive and continue in full force and effect to the maximum extent allowed by law. If a court of competent jurisdiction holds any provision of this Lease invalid, void, or unenforceable under applicable law, the court shall give the provision the greatest effect possible under the law and modify the provision so as to conform to applicable law if that can be done in a manner which does not frustrate the purpose of this Lease.

COUNTERPARTS. This Lease may be executed in one or more counterparts, each of which will be deemed to be an original copy of this Lease and all of which, when taken together, will be deemed to constitute one and the same agreement.

IN WITNESS WHEREOF, Lessor hereunto sets hand and seal.

Witness \_\_\_\_\_ (Seal)

Witness \_\_\_\_\_ (Seal)

Witness \_\_\_\_\_ (Seal)

Witness \_\_\_\_\_ (Seal)

#### ACKNOWLEDGMENT

STATE OF \_\_\_\_\_ )  
 ) SS:  
COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared \_\_\_\_\_, known to me (or satisfactorily proven) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged that \_\_\_\_\_ executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: \_\_\_\_\_  
Signature/Notary Public: \_\_\_\_\_  
Name/Notary Public (print): \_\_\_\_\_

#### CORPORATE ACKNOWLEDGMENT

STATE OF \_\_\_\_\_ )  
 ) SS:  
COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared \_\_\_\_\_, who acknowledged himself to be the \_\_\_\_\_ of \_\_\_\_\_, a corporation, and that he as such \_\_\_\_\_, being authorized to do so, executed foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as \_\_\_\_\_.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: \_\_\_\_\_  
Signature/Notary Public: \_\_\_\_\_  
Name/Notary Public (print): \_\_\_\_\_

**EXHIBIT "C"**

Attached to and made a part of that certain Operating Agreement between Chesapeake Appalachia, L. L. C., Epsilon Energy USA, Inc., and Statoil USA Onshore Properties Inc. dated October 18, 2010.

## ACCOUNTING PROCEDURE JOINT OPERATIONS

### I. GENERAL PROVISIONS

#### 1. Definitions

"Joint Property" shall mean the real and personal property subject to the agreement to which this Accounting Procedure is attached.

"Joint Operations" shall mean all operations necessary or proper for the development, operation, protection and maintenance of the Joint Property.

"Joint Account" shall mean the account showing the charges paid and credits received in the conduct of the Joint Operations and which are to be shared by the Parties.

"Operator" shall mean the party designated to conduct the Joint Operations.

"Non-Operators" shall mean the Parties to this agreement other than the Operator.

"Parties" shall mean Operator and Non-Operators.

"First Level Supervisors" shall mean those employees whose primary function in Joint Operations is the direct supervision of other employees and/or contract labor directly employed on the Joint Property in a field operating capacity.

"Technical Employees" shall mean those employees having special and specific engineering, geological or other professional skills, and whose primary function in Joint Operations is the handling of specific operating conditions and problems for the benefit of the Joint Property.

"Personal Expenses" shall mean travel and other reasonable reimbursable expenses of Operator's employees.

"Material" shall mean personal property, equipment or supplies acquired or held for use on the Joint Property.

"Controllable Material" shall mean Material which at the time is so classified in the Material Classification Manual as most recently recommended by the Council or Petroleum Accountants Societies.

#### 2. Statement and Billings

Operator shall bill Non-Operators on or before the last day of each month for their proportionate share of the Joint Account for the preceding month. Such bills will be accompanied by statements which identify the authority for expenditure, lease or facility, and all charges and credits summarized by appropriate classifications of investment and expense except that items of Controllable Material and unusual charges and credits shall be separately identified and fully described in detail.

#### 3. Advances and Payments by Non-Operators

A. Unless otherwise provided for in the agreement, the Operator may require the Non-Operators to advance their share of estimated cash outlay for the succeeding month's operation within thirty (30) days after receipt of the billing or by the first day of the month for which the advance is required, whichever is later. Operator shall adjust each monthly billing to reflect advances received from the Non-Operators.

B. Each Non-Operator shall pay its proportion of all bills within thirty (30) days after receipt. If payment is not made within such time, the unpaid balance shall bear interest monthly at the prime rate in effect at Bank One of Oklahoma, N.A. on the first day of the month in which delinquency occurs plus 1% or the maximum contract rate permitted by the applicable usury laws in the state in which the Joint Property is located, whichever is the lesser, plus attorney's fees, court costs, and other costs in connection with the collection of unpaid amounts.

#### 4. Adjustments

Payment of any such bills shall not prejudice the right of any Non-Operator to protest or question the correctness thereof; provided, however, all bills and statements rendered to Non-Operators by Operator during any calendar year shall conclusively be presumed to be true and correct after twenty-four (24) months following the end of any such calendar year, unless within the said twenty-four (24) month period a Non-Operator takes written exception thereto and makes claim on Operator for adjustment. No adjustment favorable to Operator shall be made unless it is made within the same prescribed period. The provisions of this paragraph shall not prevent adjustments resulting from a physical inventory of Controllable Material as provided for in Section V.

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## 5. Audits

A. A Non-Operator, upon notice in writing to Operator and all other Non-Operators, shall have the right to audit Operator's accounts and records relating to the Joint Account for any calendar year within the twenty-four (24) month period following the end of such calendar year; provided, however, the making of an audit shall not extend the time for the taking of written exception to and the adjustments of accounts as provided for in Paragraph 4 of this Section I. Where there are two or more Non-Operators, the Non-Operators shall make every reasonable effort to conduct a joint audit in a manner which will result in a minimum of inconvenience to the Operator. Operator shall bear no portion of the Non-Operators' audit cost incurred under this paragraph unless agreed to by the Operator. The audits shall not be conducted more than once each year without prior approval of Operator, except upon the resignation or removal of the Operator, and shall be made at the expense of those Non-Operators approving such audit.

B. The Operator shall reply in writing to an audit report within 180 days after receipt of such report.

## 6. Approval By Non-Operators

Where an approval or other agreement of the Parties or Non-Operators is expressly required under other sections of this Accounting Procedure and if the agreement to which this Accounting Procedure is attached contains no contrary provisions in regard thereto, Operator shall notify all Non-Operators of the Operator's proposal, and the agreement or approval of a majority in interest of the Non-Operators shall be controlling on all Non-Operators.

## II. DIRECT CHARGES

Operator shall charge the Joint Account with the following items:

## 1. Ecological and Environmental

Costs incurred for the benefit of the Joint Property as a result of governmental or regulatory requirements to satisfy environmental considerations applicable to the Joint Operations. Such costs may include surveys of an ecological or archaeological nature and pollution control procedures as required by applicable laws and regulations.

## 2. Rentals and Royalties

Lease rentals and royalties paid by Operator for the Joint Operations.

## 3. Labor

- A. (1) Salaries and wages of Operator's field employees or consultants directly employed on the Joint Property in the conduct of Joint Operations.
- (2) Salaries of First level Supervisors in the field.
- (3) Salaries and wages of **on-site** Technical Employees or consultants directly employed on the Joint Property if such charges are excluded from the overhead rates.
- (4) Salaries and wages of **off-site** Technical Employees or consultants either temporarily or permanently assigned to and directly employed in the operation of the Joint Property if such charges are excluded from the overhead rates.
- B. Operator's cost of holiday, vacation, sickness and disability benefits and other customary allowances paid to employees whose salaries and wages are chargeable to the Joint Account under Paragraph 3A of this Section II. Such costs under this Paragraph 3B may be charged on a "when and as paid basis" or by "percentage assessment" on the amount of salaries and wages chargeable to the Joint Account under Paragraph 3A of this Section II. If percentage assessment is used, the rate shall be based on the Operator's cost experience.
- C. Expenditures or contributions made pursuant to assessments imposed by governmental authority which are applicable to Operator's costs chargeable to the Joint Account under Paragraphs 3A and 3B of this Section II.
- D. Personal Expenses of those employees whose salaries and wages are chargeable to the Joint Account under Paragraphs 3A and 3B of this Section II.

## 4. Employee Benefits

Operator's current costs or established plans for employees' group life insurance, hospitalization, pension, retirement, stock purchase, thrift, bonus, and other benefit plans of a like nature, applicable to Operator's labor cost chargeable to the Joint Account under Paragraphs 3A and 3B of this Section II shall be Operator's actual cost not to exceed the percent most recently recommended by the Council of Petroleum Accountants Societies.

5. **Material**

Material purchased or furnished by Operator for use on the Joint Property as provided under Section IV. Only such Material shall be purchased for or transferred to the Joint Property as may be required for immediate use and is reasonably practical and consistent with efficient and economical operations. The accumulation of surplus stocks shall be avoided.

6. **Transportation**

Transportation of employees and Material necessary for the Joint Operations but subject to the following limitations:

- A. If Material is moved to the Joint Property from the Operator's warehouse or other properties, no charge shall be made to the Joint Account for a distance greater than the distance from the nearest reliable supply store where like material is normally available or railway receiving point nearest the Joint Property unless agreed to by the Parties.
- B. If surplus Material is moved to Operator's warehouse or other storage point, no charge shall be made to the Joint Account for a distance greater than the distance to the nearest reliable supply store where like material is normally available, or railway receiving point nearest the Joint Property unless agreed to by the Parties. No charge shall be made to the Joint Account for moving Material to other properties belonging to Operator, unless agreed to by the Parties.
- C. In the application of subparagraphs A and B above, the option to equalize or charge actual trucking cost is available when the actual charge is \$400 or less excluding accessorial charges. The \$400 will be adjusted to the amount most recently recommended by the Council of Petroleum Accountants Societies.

7. **Services**

The cost of contract services, equipment and utilities provided by outside sources, except services excluded by Paragraph 10 of Section II and Paragraph i, ii, and iii, of Section III. The cost of professional consultant services and contract services of technical personnel directly engaged on the Joint Property if such charges are excluded from the overhead rates. The cost of professional consultant services or contract services of technical personnel not directly engaged on the Joint Property shall not be charged to the Joint Account unless previously agreed to by the Parties.

8. **Equipment and Facilities Furnished By Operator**

- A. Operator shall charge the Joint Account for use of Operator owned equipment and facilities at rates commensurate with costs of ownership and operation. Such rates shall include costs of maintenance, repairs, other operating expense, insurance, taxes, depreciation, and interest on gross investment less accumulated depreciation not to exceed **ten percent (10%)** per annum. Such rates shall not exceed average commercial rates currently prevailing in the immediate area of the Joint Property.
- B. In lieu of charges in Paragraph 8A above, Operator may elect to use average commercial rates prevailing in the immediate area of the Joint Property, **less 20%**. For automotive equipment, Operator may elect to use rates published by the Petroleum Motor Transport Association.

9. **Damages and Losses to Joint Property**

All costs or expenses necessary for the repair or replacement of Joint Property made necessary because of damages or losses incurred by fire, flood, storm, theft, accident, or other cause, except those resulting from Operator's gross negligence or willful misconduct. Operator shall furnish Non-Operator written notice of damages or losses incurred as soon as practicable after a report thereof has been received by Operator.

10. **Legal Expense**

Expense of handling, investigating and settling litigation or claims, discharging of liens, payment of judgments and amounts paid for settlement of claims incurred in or resulting from operations under the agreement or necessary to protect or recover the Joint Property, **except no charge for services of operator's legal staff or fees of outside attorneys performing services other than title examination** shall be made unless previously agreed to by the parties. All other legal expense is considered to be covered by the overhead provisions of Section III unless otherwise agreed to by the Parties, except as provided in Section I, Paragraph 3.

11. **Taxes**

All taxes of every kind and nature assessed or levied upon or in connection with the Joint Property, the operation thereof, or the production therefrom, and which taxes have been paid by the Operator for the benefit of the Parties. If the ad valorem taxes are based in whole or in part upon separate valuations of each party's working interest, then notwithstanding anything to the contrary herein, charges to the Joint Account shall be made and paid by the Parties hereto in accordance with the tax value generated by each party's working interest.

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**12. Insurance**

Net premiums paid for insurance required to be carried for the Joint Operations for the protection of the Parties unless insurance coverage is already secured individually outside the Joint Operations in accordance with Exhibit D of that the Operating Agreement to which this is attached dated December 16, 2010.

2009. In the event Joint Operations are conducted in a state in which Operator may set as self-insurer for Worker's Compensation and/or Employers Liability under the respective state's laws, Operator may, at its election, include the risk under its self-insurance program and in that event, Operator shall include a charge at Operator's cost not to exceed manual rates.

**13. Abandonment and Reclamation**

Costs incurred for abandonment of the Joint Property, including costs required by governmental or other regulatory authority.

**14. Communications**

Cost of acquiring, leasing, installing, operating, repairing and maintaining communication systems, including radio and microwave facilities directly serving the Joint Property. In the event communication facilities/systems serving the Joint Property are Operator owned, charges to the Joint Account shall be made as provided in Paragraph 8 of this Section II.

**15. Other Expenditures**

Other expenditure not covered or dealt with in the foregoing provisions of this Section II, or in Section III and which is of direct benefit to the Joint Property and is incurred by the Operator in the necessary and proper conduct of the Joint Operations.

**III. OVERHEAD****1. Overhead - Drilling and Producing Operations**

i. As compensation for administrative, supervision, office services and warehousing costs, Operator shall charge drilling and producing operations on either:

- ( ☒ ) Fixed Rate Basis, Paragraph 1A, or  
( ☐ ) Percentage Basis, Paragraph 1B

Unless otherwise agreed to by the Parties, such charge shall be in lieu of costs and expenses of all offices and salaries or wages plus applicable burdens and expenses of all personnel, except those directly chargeable under Paragraph 3A, Section II. The cost and expense of services from outside sources in connection with matters of taxation, traffic, accounting or matters before or involving governmental agencies shall be considered as included in the overhead rates provided for in the above selected Paragraph of this Section III unless such cost and expense are agreed to by the Parties as a direct charge to the Joint Account.

ii. The salaries, wages and Personal Expenses of Technical Employees and/or the cost of professional consultant services and contract services of technical personnel directly employed on the Joint Property:

- ( ☒ ) shall be covered by the overhead rates, or  
( ☐ ) shall not be covered by the overhead rates.

iii. The salaries, wages and Personal Expenses of Technical Employees and/or costs of professional consultant services and contract services of technical personnel either temporarily or permanently assigned to and directly employed in the operation of the Joint Property:

- ( ☒ ) shall be covered by the overhead rates except that the salaries, wages and Personal Expenses of those positions set forth on Exhibit C-1 employed directly in the operation of the Joint Property shall not be covered by the overhead rates and shall be chargeable as direct labor to the extent such services are supported by detailed timesheets and further provided the services shall not include managerial supervision or administrative services associated with such operations.  
( ☐ ) shall not be covered by the overhead rates.

**A. Overhead - Fixed Rate Basis**

(1) Operator shall charge the Joint Account at the following rates per well per month:

Drilling Well Rate \$ 13,000 (Prorated for less than a full month)

Producing Well Rate \$ 1,300

(2) Application of Overhead - Fixed Rate Basis shall be as follows:

**(a) Drilling Well Rate**

- (1) Charges for drilling wells shall begin on the date the well is spudded and terminate on the date the drilling rig, completion rig, or other units used in completion of the well is released, whichever is later, except that no charge shall be made during suspension of drilling or completion operations



COPAS

for fifteen (15) or more consecutive calendar days.

- (2) Charges for wells undergoing any type of workover or recompletion for a period of five (5) consecutive work days or more shall be made at the drilling well rate. Such charges shall be applied for the period from date workover operations, with rig or other units used in workover, commence through date of rig or other unit release, except that no charge shall be made during suspension of operations for fifteen (15) or more consecutive calendar days.

(b) Producing Well Rates

- (1) An active well either produced or injected into for any portion of the month shall be considered as a one-well charge for the entire month.
- (2) Each active completion in a multi-completed well in which production is not commingled down hole shall be considered as a one-well charge providing each completion is considered a separate well by the governing regulatory authority.
- (3) An inactive gas well shut in because of overproduction or failure of purchaser to take the production shall be considered as a one-well charge providing the gas well is directly connected to a permanent sales outlet.
- (4) A one-well charge shall be made for the month in which plugging and abandonment operations are completed on any well. This one-well charge shall be made whether or not the well has produced except when drilling well rate applies.
- (5) All other inactive wells (including but not limited to inactive wells covered by unit allowable, lease allowable, transferred allowable, etc.) shall not qualify for an overhead charge.
- (3) The well rates shall be adjusted as of the first day of April each year following the effective date of the agreement to which this Accounting Procedure is attached by the percent increase or decrease published by COPAS

2. Overhead - Major Construction

To compensate Operator for overhead costs incurred in the construction and installation of fixed assets, the expansion of fixed assets, and any other project clearly discernible as a fixed asset required for the development and operation of the Joint Property, Operator shall either negotiate a rate prior to the beginning of construction, or shall charge the Joint Account for overhead based on the following rates for any Major Construction project in excess of \$ 25,000.00 :

- A. 3.0 % of first \$100,000 or total cost if less, plus
- B. 2.0 % of costs in excess of \$100,000 but less than \$1,000,000, plus
- C. 1.0 % of costs in excess of \$1,000,000.

Total cost shall mean the gross cost of any one project. For the purpose of this paragraph, the component parts of a single project shall not be treated separately and the cost of drilling and workover wells and artificial lift equipment shall be excluded.

3. Catastrophe Overhead

To compensate Operator for overhead costs incurred in the event of expenditures resulting from a single occurrence due to oil spill, blowout, explosion, fire, storm, hurricane, or other catastrophes as agreed to by the Parties, which are necessary to restore the Joint Property to the equivalent condition that existed prior to the event causing the expenditures, Operator shall either negotiate a rate prior to charging the Joint Account or shall charge the Joint Account for overhead based on the following rates:

- A. 3.0 % of total costs through \$100,000; plus
- B. 2.0 % of total costs in excess of \$100,000 but less than \$1,000,000; plus
- C. 1.0 % of total costs in excess of \$1,000,000.

Expenditures subject to the overheads above will not be reduced by insurance recoveries, and no other overhead provisions of this Section III shall apply.

4. Amendment of Rates

The overhead rates provided for in this Section III may be amended from time to time only by mutual agreement between the Parties hereto if, in practice, the rates are found to be insufficient or excessive.

## IV. PRICING OF JOINT ACCOUNT MATERIAL PURCHASES, TRANSFERS AND DISPOSITIONS

Operator is responsible for Joint Account Material and shall make proper and timely charges and credits for all Material movements affecting the Joint Property. Operator shall provide all Material for use on the Joint Property; however, at Operator's option, such Material may be supplied by the Non-Operator. Operator shall make timely disposition of idle and/or surplus Material, such disposal being made either through sale to Operator or Non-Operator, division in kind, or sale to outsiders. Operator may purchase, but shall be under no obligation to purchase, interest of Non-Operators in surplus condition A or B Material. The disposal of surplus Controllable Material not purchased by the Operator shall be agreed to by the Parties.

## 1. Purchases

Material purchased shall be charged at the price paid by Operator after deduction of all discounts received. In case of Material found to be defective or returned to vendor for any other reasons, credit shall be passed to the Joint Account when adjustment has been received by the Operator.

## 2. Transfers and Dispositions

Material furnished to the Joint Property and Material transferred from the Joint Property or disposed of by the Operator, unless otherwise agreed to by the Parties, shall be priced on the following basis exclusive of cash discounts:

## A. New Material (Condition A)

## (1) Tubular Goods Other than Line Pipe

- (a) Tubular goods, sized 2 3/8 inches OD and larger, except line pipe, shall be priced at Eastern mill published carload base prices effective as of date of movement plus transportation cost using the 80,000 pound carload weight basis to the railway receiving point nearest the Joint Property for which published rail rates for tubular goods exist. If the 80,000 pound rail rate is not offered, the 70,000 pound or 90,000 pound rail rate may be used. Freight charges for tubing will be calculated from Lorain, Ohio and casing from Youngstown, Ohio.
- (b) For grades which are special to one mill only, prices shall be computed at the mill base of that mill plus transportation cost from that mill to the railway receiving point nearest the Joint Property as provided above in Paragraph 2.A.(1)(a). For transportation cost from points other than Eastern mills, the 30,000 pound Oil Field Haulers Association interstate truck rate shall be used.
- (c) Special end finish tubular goods shall be priced at the lowest published out-of-stock price, f.o.b. Houston, Texas, plus transportation cost, using Oil Field Haulers Association interstate 30,000 pound truck rate, to the railway receiving point nearest the Joint Property.
- (d) Macaroni tubing (size less than 2 3/8 inch OD) shall be priced at the lowest published out-of-stock prices f.o.b. the supplier plus transportation costs, using the Oil Field Haulers Association interstate truck rate per weight of tubing transferred, to the railway receiving point nearest the Joint Property.

## (2) Line Pipe

- (a) Line pipe movements (except size 24 inch OD and larger with walls 3/4 inch and over) 30,000 pounds or more shall be priced under provisions of tubular goods pricing in Paragraph A.(1)(a) as provided above. Freight charges shall be calculated from Lorain, Ohio.
- (b) Line Pipe movements (except size 24 inch OD) and larger with walls 3/4 inch thick and over) less than 30,000 pounds shall be priced at Eastern mill published carload base prices effective as of date of shipment, plus the percentage recommended by COPAS, plus transportation costs based on freight rates as set forth under provisions of tubular goods pricing in Paragraph A.(1)(a) as provided above. Freight charges shall be calculated from Lorain, Ohio.
- (c) Line pipe 24 inch OD and over and 3/4 inch wall and larger shall be priced f.o.b. the point of manufacture at current new published prices plus transportation cost to the railway receiving point nearest the Joint Property.
- (d) Line pipe, including fabricated line pipe, drive pipe and conduit not listed on published price lists shall be priced at quoted prices plus freight to the railway receiving point nearest the Joint Property or at prices agreed to by the Parties.
- (3) Other Material shall be priced at the current new price, in effect at date of movement, as listed by a reliable supply store nearest the Joint Property, or point of manufacture, plus transportation costs, if applicable, to the railway receiving point nearest the Joint Property.
- (4) Unused new Material, except tubular goods, moved from the Joint Property shall be priced at the current new price, in effect on date of movement, as listed by a reliable supply store nearest the Joint Property, or point of manufacture, plus transportation costs, if applicable, to the railway receiving point nearest the Joint Property. Unused new tubulars will be priced as provided above in Paragraph 2.A.(1) and (2).

## B. Good Used Material (Condition B)

Material in sound and serviceable condition and suitable for reuse without reconditioning:

## (1) Material moved to the Joint Property

At seventy-five percent (75%) of current new price, as determined by Paragraph A.

## (2) Material used on and moved from the Joint Property

(a) At seventy-five percent (75%) of current new price, as determined by Paragraph A, if Material was originally charged to the Joint Account as new Material or

(b) At sixty-five percent (65%) of current new price, as determined by Paragraph A, if Material was originally charged to the Joint Account as used Material

## (3) Material not used on and moved from the Joint Property

At seventy-five percent (75%) of current new price as determined by Paragraph A.

The cost of reconditioning, if any, shall be absorbed by the transferring property.

## C. Other Used Material

## (1) Condition C

Material which is not in sound and serviceable condition and not suitable for its original function until after reconditioning shall be priced at fifty percent (50%) of current new price as determined by Paragraph A. The cost of reconditioning shall be charged to the receiving property, provided Condition C value plus cost of reconditioning does not exceed Condition B value.

## (2) Condition D

Material, excluding junk, no longer suitable for its original purpose, but usable for some other purpose shall be priced on a basis commensurate with its use. Operator may dispose of Condition D Material under procedures normally used by Operator without prior approval of Non-Operators.

(a) Casing, tubing, or drill pipe used as line pipe shall be priced as Grade A and B seamless line pipe of comparable size and weight. Used casing, tubing or drill pipe utilized as line pipe shall be priced at used line pipe prices.

(b) Casing, tubing or drill pipe used as higher pressure service lines than standard line pipe, e.g. power oil lines, shall be priced under normal pricing procedures for casing, tubing, or drill pipe. Upset tubular goods shall be priced on a non upset basis.

## (3) Condition E

Junk shall be priced at prevailing prices. Operator may dispose of Condition E Material under procedures normally utilized by Operator without prior approval of Non-Operators.

## D. Obsolete Material

Material which is serviceable and usable for its original function but condition and/or value of such Material is not equivalent to that which would justify a price as provided above may be specially priced as agreed to by the Parties. Such price should result in the Joint Account being charged with the value of the service rendered by such Material.

## E. Pricing Conditions

(1) Loading or unloading costs may be charged to the Joint Account at the rate of twenty-five cents (25¢) per hundred weight on all tubular goods movements, in lieu of actual loading or unloading costs sustained at the stocking point. The above rate shall be adjusted as of the first day of April each year following January 1, 1985 by the same percentage increase or decrease used to adjust overhead rates in Section III, Paragraph 1.A.(3). Each year, the rate calculated shall be rounded to the nearest cent and shall be the rate in effect until the first day of April next year. Such rate shall be published each year by the Council of Petroleum Accountants Societies.

(2) Material involving erection costs shall be charged at applicable percentage of the current knocked-down price of new Material.

(3) Operator will pass along to Non-Operator a proportionate share of all bulk savings Operator receives from its vendors.



**3. Premium Prices**

Whenever Material is not readily obtainable at published or listed prices because of national emergencies, strikes or other unusual causes over which the Operator has no control, the Operator may charge the Joint Account for the required Material at the Operator's actual cost incurred in providing such Material, in making it suitable for use, and in moving it to the Joint Property; provided notice in writing is furnished as Non-Operators of the proposed charge prior to billing Non-Operators for such Material. Each Non-Operator shall have the right, by so electing and notifying Operator within ten days after receiving notice from Operator, to furnish in kind all or part of its share of such Material suitable for use and acceptable to Operator.

**4. Warranty of Material Furnished By Operator**

Operator does not warrant the Material furnished. In case of defective Material, credit shall not be passed to the Joint Account until adjustment has been received by Operator from the manufacturers or their agents.

**V. INVENTORIES**

The Operator shall maintain detailed records of Controllable Material.

**1. Periodic Inventories, Notice and Representation**

At reasonable intervals, inventories shall be taken by Operator of the Joint Account Controllable Material. Written notice of intention to take inventory shall be given by Operator at least thirty (30) days before any inventory is to begin so that Non-Operators may be represented when any inventory is taken. Failure of Non-Operators to be represented at an inventory shall bind Non-Operators to accept the inventory taken by Operator.

**2. Reconciliation and Adjustment of Inventories**

Adjustments to the Joint Account resulting from the reconciliation of a physical inventory shall be made within six months following the taking of the inventory. Inventory adjustments shall be made by Operator to the Joint Account for overages and shortages, but, Operator shall be held accountable only for shortages due to lack of reasonable diligence.

**3. Special Inventories**

Special inventories may be taken whenever there is any sale, change of interest, or change of Operator in the Joint Property. It shall be the duty of the party selling to notify all other Parties as quickly as possible after the transfer of interest takes place. In such cases, both the seller and the purchaser shall be governed by such inventory. In cases involving a change of Operator, all Parties shall be governed by such inventory.

**4. Expense of Conducting Inventories**

- A. The expense of conducting periodic inventories shall not be charged to the Joint Account unless agreed to by the Parties.
- B. The expense of conducting special inventories shall be charged to the Parties requesting such inventories, except inventories required due to change of Operator shall be charged to the Joint Account.

**EXHIBIT C-1**

Attached to and made a part of that certain Operating Agreement dated October 18, 2010, by and between Chesapeake Appalachia, L.L.C., as Operator, Epsilon Energy USA, Inc., as Non-Operator and Statoil USA Onshore Properties Inc., as Non-Operator

**TECHNICAL EMPLOYEES EXCLUDED FROM OVERHEAD RATES**

TITLE	CATEGORY
ASSOCIATE GEOLOGIST	Technical Labor
ASSOCIATE GEOPHYSICIST	Technical Labor
GEOLOGIST	Technical Labor
GEOPHYSICIST	Technical Labor
SR GEOLOGIST	Technical Labor
SR GEOPHYSICIST	Technical Labor
ASSET MANAGER	Technical Labor
ASSOCIATE ASSET MANAGER	Technical Labor
DRILLING ENGINEER I	Technical Labor
DRILLING ENGINEER II	Technical Labor
FIELD ENGINEER	Technical Labor
SR DRILLING ENGINEER	Technical Labor
SR ASSET MANAGER	Technical Labor

EXHIBIT "D"

Attached to and made a part of that certain Operating Agreement dated October 18, 2010 between Chesapeake Appalachia, L. L. C., Operator, and Epsilon Energy USA, Inc., Non-Operator and Statoil USA Onshore Properties Inc., Non-Operator

**Insurance Provisions**

- I. As to all operations hereunder, Operator shall at all times while operations are conducted by it for the Joint Account, carry or cause to be carried, pay for, and charge to the Joint Account the following minimum insurance:

Worker's Compensation, including Employer's Liability Insurance with limits of not less than \$1,000,000, covering the employees of Operator engaged in operations hereunder and in compliance with all applicable state and federal laws.

- II. In addition, as to all operations hereunder, except as provided in Paragraph III below, each party shall carry for its own interest the following types and limits of insurance, or insurance which will provide coverage for a party's interest to the extent required below:

- (a) Automobile Insurance including non-owned and hired vehicles, coverage with combined single limit per occurrence of not less than \$1,000,000 for bodily injury and property damage.
- (b) General Liability Insurance with a combined single limit per occurrence of not less than \$1,000,000 for bodily injury and property damage. Such policy shall be endorsed to provide Blanket Contractual Liability covering obligations assumed herein.
- (c) Excess Umbrella Liability Insurance with a combined limit per occurrence coverage of not less than \$25,000,000.
- (d) Operator's Extra Expense policy with limits of \$25,000,000 per occurrence covering all losses or damages resulting from loss of well control, explosions, fire, cratering, including expenses of clean-up containment, seepage, pollution or contamination.

The premiums for all such insurance to be carried in Paragraph II shall be paid solely by each party.

To the extent of the liabilities assumed by each party herein, all of the above insurance, to the extent carried by a party as provided in Paragraph III below, shall be endorsed to provide that each party's insurers waive their right of subrogation (equitable or by assignment, express or implied, loan receipt or otherwise) against the other party. Each party's insurance coverage shall be primary over any insurance coverage maintained by the other party. Each party hereto may acquire at its own expense, any additional insurance to protect itself. Each such policy shall provide for underwriters waiver of subrogation in favor of each party to the extent of those liabilities assumed by each party herein.

- III. With regard to the aforementioned, Operator shall have the right, but not the obligation, to require satisfactory evidence of adequate insurance or self-insurance. Operator shall not provide this coverage for the benefit of the Joint Account. In the event that any party fails to provide evidence of insurance or evidence of ability to self insure as required herein ("failing party"), the other Party may, at its sole discretion, provide such insurance for and at the direct expense of the failing party. A party is under no obligation to provide such insurance for the party so failing to provide satisfactory evidence of its own insurance or evidence of ability to self insure and nothing contained herein shall be construed to alter the obligations of any party hereunder. Notwithstanding any of the foregoing, each party shall be allowed to self-insure for its interests.



**EXHIBIT "E"**

Attached to and made a part of that certain Operating Agreement dated October 18, 2010 between Chesapeake Appalachia, L. L. C., Operator, and Epsilon Energy USA, Inc., Non-Operator and Statoil USA Onshore Properties Inc., Non-Operator.

**Gas Balancing Agreement**

**I. DEFINITIONS:**

For the purposes of this Gas Balancing Agreement ("GBA") the following terms shall be defined as follows:

(a) "Affiliate" shall have the meaning ascribed to such term in the Operating Agreement.

(b) The "Allowable" is the maximum rate of Gas production from each Gas Well permitted from time to time by the regulatory authority having jurisdiction.

(c) "Balance" is the condition occurring when a party has utilized, sold or disposed of a Quantity of Gas equal to the same percentage of the cumulative Gas production as such party's Percentage Ownership during the period of such cumulative Gas production.

(d) "Deliverability" shall mean the maximum sustainable daily Gas withdrawal from a Gas Well which may be accomplished without detriment to ultimate recovery of reserves as determined by Operator acting in good faith and taking into account relevant operational factors including, but not limited to, pipeline capacity and pressure and the maximum producing capability of the Gas Well based on data reported to the appropriate governmental agency having jurisdiction.

(e) "Gas" shall mean all gaseous hydrocarbons produced from each Gas Well but shall not include liquid hydrocarbons.

(f) "Gas Well" shall mean each well subject to the Operating Agreement that produces gas. If a single Gas Well is completed in two or more reservoirs, such Gas Well will be considered a separate Gas Well with respect to, but only as to, each reservoir from which the Gas production is not commingled in the well bore.

(g) "MMBtu" shall mean one million British thermal units.

(h) "Operating Agreement" means the operating agreement between the Parties to which this GBA is attached.

(i) "Operator" means the Party designated as operator under the Operating Agreement.

(j) "Overproduced" is the condition occurring when a party has utilized, disposed of or sold a greater Quantity of Gas from a particular Gas Well at any given time (individually or through its gas purchaser) than if such party were in Balance.

(k) "parties" means the legal entities that are signatory to the Operating Agreement, or their successors and assigns. Parties shall be referred to individually as a party.

(l) "Percentage Ownership" is the percentage interest of each party in each Gas Well as set forth in or determined in accordance with the provisions of the Operating Agreement, as such interest may change from time to time.

(m) "Percentage of Proceeds Sale" means a sale of Gas processed in a gas processing plant the price for which is computed as a percentage of the proceeds from the resale of residue gas and natural gas liquids attributable to such Gas.

(n) "Quantity" shall mean the number of units of Gas expressed in MMBtus.

(o) "Underproduced" is the condition occurring when a party has utilized, disposed of or sold a lesser Quantity of Gas from a particular Well at any given time (individually or through its gas purchaser) than if such party were in Balance.

## II. APPLICATION OF THIS AGREEMENT

The provisions of this GBA shall be separately applicable to each Gas Well to the end that Gas production from one Gas Well may not be utilized for the purposes of balancing underproduction of Gas from any other Gas Well.

## III. OVERPRODUCTION

### A. Right to Take All Gas Produced

Subject to the other provisions herein, during any period when any party hereto is not marketing or otherwise disposing of or utilizing its Percentage Ownership of the Allowable or Deliverability, as applicable, of Gas from any Gas Well, the other parties shall be entitled--but shall not have the obligation--to take, in addition to their own Percentage Ownership of Gas, that portion of such other party's Percentage Ownership of Gas which said party is not marketing, utilizing or otherwise disposing of, and shall be entitled to take such Gas production and deliver same to its or their purchasers in accordance with the provisions herein. Each such taking party shall have the right to take its pro rata portion of each such non-taking party's share, said pro rata portion being based on the ratio of its Percentage Ownership to the Percentage Ownership of all parties in the same balancing status (either Overproduced or Underproduced) who elect to take such non-taking party's share of gas; provided, however, an Underproduced party desiring to take a non-taking party's share of Gas shall take precedence over an Overproduced party which wishes to take such non-taking party's Gas, and an Overproduced party shall be entitled to take a non-taking party's share of Gas only to the extent that an Underproduced party has elected not to take said Gas. The Gas of a party not taking its production shall be allocated to a taking party hereunder prior to calculation of percentage entitlement to make up Gas from an Overproduced party under Article IV, below.

Notwithstanding the foregoing, all parties shall share in and own the liquid hydrocarbons recovered from Gas by primary separation equipment in accordance with their respective Percentage Ownership, which liquid hydrocarbon ownership shall be unaffected by this GBA. One or more parties may arrange to have their Gas processed in a gas processing plant for the recovery of liquefiable hydrocarbons. Nothing in this GBA shall afford a basis for balancing any liquefiable hydrocarbons recovered from a Gas processing plant. Each party taking Gas shall own all of the Gas delivered to its purchaser.

### B. Limitation on Overproduced Party's Right to Take Gas

Notwithstanding the provisions of Article III.A., above, if during any time and from time to time an Overproduced party shall have taken more than one hundred percent (100%) of such party's Percentage Ownership share of the estimated ultimate recoverable reserves for a Gas Well as determined by Operator acting in good faith, said Overproduced party shall not, after receipt of written notice of said fact from Operator, be entitled to take, sell or otherwise dispose of Gas from such Gas Well until such time as said party is no longer Overproduced; provided, however, said Overproduced party may take Gas from such Gas Well without restriction if and for so long as the other parties are not taking Gas from such Gas Well their full share of the Gas or as otherwise authorized by all of the Underproduced parties. Also, no Overproduced party shall at any time be entitled to take, sell or otherwise dispose of more than 300% of its Percentage Ownership of the Allowable from a Gas Well or, if there is no Allowable established, of the Deliverability of a Gas Well.



C. Credit For Gas in Storage

Each party who markets less than its Percentage Ownership of the Gas produced shall be credited with Gas in storage equal to its Percentage Ownership share of the Gas produced, less the Gas actually marketed and taken by said party, and less such Party's Percentage Ownership share of the Gas, vented, used or lost in lease operations.

IV. RIGHT OF UNDERPRODUCED PARTY TO MAKE UP PRODUCTION

Any Underproduced party may commence making up its underproduction provided it has given written notice to the Operator not later than the fifth day of the month preceding the month in which it wishes to commence making up its underproduction, or within such other time as Operator may from time to time reasonably establish.

In addition to its Percentage Ownership and its rights to a non-taking party's Gas under Article III, above, each Underproduced party will be entitled to take up to an additional twenty-five percent (25%) of the monthly Quantity of each Overproduced party's Percentage Ownership in Gas produced during any month; provided, however, nothing in this Article IV shall reduce the right of any Overproduced party to take a Quantity of Gas available for sale during any month less than seventy-five percent (75%) of its Percentage Ownership in Gas produced in said month.

If at any time more than one Underproduced party is taking a Quantity of Gas in excess of its Percentage Ownership in Gas production in order to balance its Gas production account ("Makeup"), then each such Underproduced party shall be entitled to take such Makeup in proportion that its Percentage Ownership bears to the total Percentage Ownership of all Underproduced parties desiring to take Makeup from the Well. Any portion of the Makeup to which an Underproduced party is entitled and which is not taken by such Underproduced party may be taken by any other Underproduced party in the proportion that its Percentage Ownership bears to the total Percentage Ownership of all Underproduced parties desiring to take such untaken portion of Makeup.

V. MONTHLY DATA AND STATEMENTS TO BE PROVIDED

The Operator will establish and maintain a current Gas account which shows the Gas balance which exists for all the parties and will furnish each of these parties a monthly statement showing the total Quantity of Gas sold and taken in kind and the current and cumulative over and under account of each party within ninety (90) days following the end of each applicable month. Operator shall not incur any liability to any party for errors in the data provided by each party or third parties or for other matters pertaining to gas balancing statements (e.g., transporter's allocation of Gas). Each party shall be responsible for promptly providing written notification to Operator of any error(s) or inaccuracy(ies) contained in any gas balancing statement which it receives.

VI. PAYMENT OF ROYALTIES AND PRODUCTION TAXES

At all times while Gas is produced from a Well, each party hereto will make, or cause to be made, settlement with respective royalty owners to whom each is accountable in accordance with the actual volumes of Gas taken by such party. Upon written request from any party, any other party shall provide on a monthly basis, any additional information which such requesting party may require in order to comply with its obligation to pay royalty pursuant to the terms hereof including, without limitation, name, address, decimal interest, tax identification and, to the extent it has same, title opinions and abstracts of ownership. The term "royalty owner" includes owners of royalty, overriding royalties, production payments and similar interests. Each party agrees to indemnify and hold harmless each other party from any and all claims asserted by its royalty owners and its Gas Purchasers for which said indemnifying party is responsible. Each party producing and/or delivering Gas to its purchaser shall pay, or cause to be paid, any and all production, severance and other similar taxes due on such Gas in accordance with the actual volumes of Gas taken by such party.



## VII. CASH SETTLEMENTS

### A. Events Occasioning Cash Settlements

A cash settlement of any imbalance of Gas production: (i) shall be made when production from a Gas Well permanently ceases or the Operating Agreement otherwise terminates (each being referred to herein as "Termination"); and (ii) shall be made by an Overproduced party at the request and option of any Underproduced party or parties upon the sale, transfer, assignment, mortgage or other disposition to an unaffiliated entity (herein individually or collectively referred to as a "Transfer"), by an Overproduced party of all or any portion of its Percentage Ownership in any Gas Well unless (x) the Transfer documentation clearly provides that the assignee has expressly assumed the gas balance position of, and the liability for gas imbalances from, the assignor, (y) the assignee is not a known credit risk and the assignor has provided to the other parties evidence of the creditworthiness of assignee prior to the date that the applicable Transfer becomes effective taking into account the potential liability associated with the applicable gas imbalance. (A cash settlement pursuant to clause (ii) above may hereinafter be referred to as an "Optional Cash Settlement".) The parties acknowledge that a cash settlement may be made on more than one occasion pursuant to the terms of this GBA.

### B. Notification of Proposed Transfer By Overproduced Party

When an Overproduced party elects to Transfer all or a portion of its Percentage Ownership (except to an Affiliate, or where the liability for prior period gas imbalances is assumed by an assignee), it shall give notice to all other parties to the Operating Agreement of its intended Transfer and the anticipated closing date. Each Underproduced party shall have fifteen (15) days from the receipt of such notice in which to elect to receive a cash settlement from the transferring party for the transferring party's share of overproduction allocable to the Underproduced party. Such election shall be made in writing and sent to the transferring party and Operator. An Underproduced party's election not to request a cash settlement at the time of Transfer by an Overproduced party shall not, subject to the provisions of Article VII.E, below, preclude said Underproduced party from sharing in cash settlement at Termination or from requesting a cash settlement upon subsequent Transfer by an Overproduced party.

### C. Quantity of Gas

Within one hundred twenty (120) days after Termination, Operator shall provide a statement captioned "Final Quantity Statement" showing on a party-by-party basis the net unrecouped underproduction, the overproduction and the months and years in which such underproduction and overproduction occurred. Quantities of Gas for which settlement is due shall be determined by accruing the monthly overproduction and underproduction in the order of accrual of said overproduction and underproduction; i.e. makeup Quantities taken by an Underproduced party shall be applied against the oldest overproduction and underproduction then outstanding. In the event an Optional Cash Settlement is requested, Operator shall provide to the parties, within fifteen business days, an Interim Quantity Statement through the end of the last quarter for which Operator has production data, which shall contain similar information as would be contained within a Final Quantity Statement.

### D. Pricing

#### 1. For Overproduction Sold

The amount to be paid by an Overproduced party to an Underproduced party for such Underproduced party's Gas upon cash settlement shall, where the Overproduced party has sold the Gas to an unaffiliated third party, be based upon the price received by the Overproduced party at the time such overproduction occurred (the "price received") shall be the gross proceeds received, less the following:

- (a) production and/or severance taxes attributable to said Gas production paid by the Overproduced party;
- (b) royalties, if any, paid by the Overproduced party to an Underproduced party's royalty owner(s) to the extent said payments amounted to a discharge of said Underproduced party's royalty obligation;
- (c) any other payments made by the Overproduced party to obligees of the Underproduced party to the extent said payments by the Overproduced party were required by law and/or amounted to discharge of the obligations of the Underproduced party; and
- (d) all reasonable costs and expenses incurred to third parties in connection with the sale of said Gas; e.g., gathering, transportation, compression, storage, marketing and similar fees.

In the event sales by the Overproduced party were made to an Affiliate and the price paid by such Affiliate was less than the prevailing market price in the area of the Well at the time of the sale, then the price received shall be deemed to be the WAHA Index price for the applicable month of overproduction, calculated from a pricing bulletin published at the time such overproduction occurred, less those items set forth in a-d above (the "Adjusted WAHA Index Price"). Any Underproduced party that is entitled to payment with respect to the applicable cash settlement may, based upon competent evidence, object that sales by the Overproduced party to an Affiliate were at a price less than the prevailing market price in the area of the Well at the time of the sale, in which case the Adjusted WAHA Index Price shall be used to price such sales in accordance with the prior sentence.

## 2. For Overproduction Taken or Utilized and Not Sold

If there is no actual sale to establish the amount received by the Overproduced party because the Overproduced party took such Gas for its own purposes instead of selling it, the amount to be paid by an Overproduced party to an Underproduced party for such Underproduced party's Gas upon cash settlement shall be based upon the Adjusted WAHA Index Price.

## 3. Proceeds for Liquefiable Hydrocarbons Not Included

The parties agree that the terms "price received by an Overproduced party" and "weighted average price received" shall not include any compensation received by a party for liquid hydrocarbons derived from processing its Gas in a Gas processing plant, unless the overproduction for which the Overproduced party is accounting was sold under a Percentage of Proceeds Sale.

## E. Calculation, Collection and Distribution of Payments

### 1. For Cash Settlements at Termination

In the event of a cash settlement at Termination, within ten (10) days after receipt of the Final Quantity Statement from the Operator, each Overproduced party shall furnish to the Operator and the other parties a statement showing the price received for its overproduction on a monthly basis. Within ten (10) days after receipt of such pricing information from all parties, Operator shall submit to each party a statement showing the calculations and the total amount to be paid by each Overproduced party and to be received by each Underproduced party. Cash settlement shall be calculated on the "FIFO" accounting method.

Within twenty (20) days after receipt of said statement from Operator by an Overproduced party, the Overproduced party shall pay all amounts due and owing as reflected on such statement to the Underproduced parties. In the event that all sums due and owing are not paid by an Overproduced party to the applicable Underproduced parties



within the time periods set forth in this provision, interest shall accumulate on such unpaid amounts as provided herein. The amount to be received by each Underproduced party shall be determined by apportioning the total amount to be received by all Underproduced parties from all Overproduced parties among all Underproduced parties in proportion to the total sum to be received by each Underproduced party as a percent of the total sum to be received by all Underproduced parties. The amount to be paid by each Overproduced party to each Underproduced party shall be determined by apportioning the total amount to be paid by all Overproduced parties to each such Underproduced party among all Overproduced parties in proportion to the total sum to be paid by each such Overproduced party to all Underproduced parties as a percent of the total sum to be paid by all Overproduced parties to all Underproduced parties.

2. Optional Cash Settlement Pursuant to Article VII.A.(ii) from an Overproduced party Who Seeks to Transfer an Interest

In the event of a request for an Optional Cash Settlement by an Underproduced party pursuant to Article VII.A.(ii) from an Overproduced party who wishes to Transfer all or a portion of its Percentage Ownership, within twenty (20) working days after receipt of Operator's Interim Quantity Statement, the Overproduced party from whom cash settlement is sought shall provide to Operator a statement showing the price received for its overproduction on a monthly basis. Within ten (10) working days after receipt of such pricing information, Operator shall: (a) calculate the total amount due and owing by the Overproduced party and the total amount to be received by each Underproduced party requesting cash settlement based on the "FIFO" accounting method; and (b) provide the Overproduced party and each such Underproduced party with a statement showing the calculations and the total sum to be paid to said Underproduced party. The Overproduced party shall pay to each such Underproduced party the total amount due and owing as reflected in said statement within twenty (20) working days after receipt of said statement. In the event that all sums due and owing are not paid by an Overproduced party to the applicable Underproduced parties within the time periods set forth in this provision, interest shall accumulate on such unpaid amounts as provided herein.

The parties acknowledge that production and sales data may not be available for a brief period immediately preceding the closing date and prior to the effective date of the Transfer, and the transferring Overproduced party agrees to cash settle for any Gas produced during said period promptly after closing. In the event that said transferring Overproduced party for any reason fails to make all cash settlement payments required under this GBA, the transferee shall be obligated to make said payments.

3. Procedures Applicable to All Cash Settlements

For purposes of all price calculations the overproduction of each Overproduced party shall be apportioned to each Underproduced party in proportion to each Underproduced party's underproduction as a percent of the sum of the underproduction of all Underproduced parties. Overproduced volumes shall be matched to Underproduced volumes based on the order in which the overproduction and underproduction arose. The parties recognize that the months of overproduction by an Overproduced party may not coincide with the months of underproduction by an Underproduced party.

4. Amount Subject to Refund May Be Withheld.

In the event that any portion of the price actually received by an Overproduced party shall be subject to possible refund pursuant to rules and regulations issued by the Federal Energy Regulatory Commission ("FERC"), any state, administrative agency or successor governmental authority having jurisdiction, or any court order, the amount which may be ultimately required to be refunded by FERC or any other entity may be withheld without interest by the Overproduced party until such time as a final determination is made with respect thereto or until the party to whom payment is to be made provides a bond or other security to indemnify the party obligated to make such payments in form satisfactory to the latter.



F. Operator's Liability

Except as otherwise provided herein, Operator is obligated to administer the provisions of this GBA, but shall have no liability to the other parties for losses sustained or liability incurred which arise out of or in connection with the performance of Operator's duties hereunder except such as may result from Operator's gross negligence or willful misconduct.

VIII. OPERATING EXPENSES

The operating expenses are to be borne as provided in the Operating Agreement, regardless of whether all parties are selling or using Gas or whether the sales and use of each are in proportion to their Percentage Ownership.

IX. DELIVERABILITY TESTS

Nothing herein shall be construed to deny any party the right from time to time to produce and take or deliver to the purchaser its full share of the Gas production to meet the deliverability test required by its purchaser. Also, nothing herein shall: (a) require the Operator to produce a Gas Well in excess of its deliverability or the applicable maximum allowable rate where such rate is established by regulatory authority having jurisdiction from time to time; or (b) prevent an Operator from operating the Gas Well in order to conduct such tests as may be required by any applicable regulatory authority from time to time.

X. NOMINATIONS

For each party wishing to sell, utilize or dispose of Gas from a Gas Well subject to this GBA, Operator shall provide each party an initial nomination by well/delivery point(s) six working days prior to the beginning of each month. Operator shall provide each party a revised nomination by well/delivery point as necessary during the month to reflect any change in production. Allocation of gas production in any month in which the total nominations vary from the total production shall be by the Operator according to such procedures as Operator from time to time may reasonably establish. Each non-operator party agrees to indemnify Operator for any charges or penalties incurred because of over or underdeliveries as compared to its nominations, except where such charges or penalties are solely attributable to action taken by Operator in total disregard of such nominations.

XI. TERM

This GBA shall remain in full force and effect for so long as the Operating Agreement is in effect and thereafter until the gas balance accounts are settled in full.

XII. SUCCESSORS AND ASSIGNS

The terms, covenants and conditions of this GBA shall be binding upon and shall inure to the benefit of the parties hereto and their respective legal representatives, successors and assigns. The parties hereto agree to give notice of the existence of this GBA to any successor in interest and to make any transfer of any interest subject to the Operating Agreement, or any part thereof, expressly subject to the terms of this GBA.

XIII. AUDITS

Any Underproduced party shall have the right for a period of two (2) years after receipt of payment pursuant to a final accounting and after giving written notice to all parties, to audit an Overproduced party's accounts and records relating to such payment. The party conducting such audit shall bear its costs of the audit.

XIV. MISCELLANEOUS

A. No assignment shall relieve the assignor from any obligation to the other parties with respect to any overproduction taken by assignor to such assignment.

B. Any amount remaining unpaid under the GBA more than thirty (30) days after it is due shall bear interest (commencing the day after said payment was due) at the rate set forth in the Accounting Procedure (Exhibit C to the Operating Agreement).

C. Unless the context otherwise clearly indicates, words used in the singular include the plural, and the plural includes the singular.

D. Each party agrees to maintain the necessary records and documents to enable the gas balancing and cash settlements contemplated hereby to be made.

E. If any party hereto fails to timely provide to Operator the data required hereby to enable gas balancing statements and cash settlements to be promptly made, Operator, or any other party, without prejudice to other remedies, is authorized to audit the records of the non-providing party and such audit shall be at the expense of the audited party.

F. To the extent permitted by law, this GBA shall be in lieu of and take precedence over any law, statute, rule or regulation requiring Gas balancing, revenue sharing or marketing of Gas.

G. In the event that any party is in default of any payment required by this GBA or fails to provide information required under this GBA, Operator is authorized--but not required--upon thirty (30) days notification to said defaulting party, without prejudice to any other remedies it may have, to curtail said party's Gas production from any and all Gas Wells subject to this GBA and such gas may be taken by the other parties in accordance with III.B. above.

H. In the event of a conflict between the terms of this GBA and the Operating Agreement, the terms of this GBA shall govern except where the conflict is between Article VI of this GBA and the Operating Agreement, in which event the Operating Agreement shall govern.

I. Nothing in this GBA shall be construed as precluding cash balancing at any time as may be agreed by the parties.

J. Nothing contained in this GBA shall require an Overproduced Party to pay to an Underproduced Party a sum which would be violative of any law, rule or regulation.

EXHIBIT "F"

Attached to and made a part of that certain Operating Agreement dated October 18, 2010 between Chesapeake Appalachia, L. L. C., Operator, and Epsilon Energy USA, Inc., Non-Operator and Statoil USA Onshore Properties Inc., Non-Operator

**Equal Employment Opportunity**

During the performance of this agreement, the Operator shall be bound by and comply with all terms and provisions of Section 202 of Executive Order 11246 of September 24, 1965, all of which are incorporated herein by references to the same extent as if fully set out herein, and shall be bound by and comply with the rules, regulations and relevant orders adopted pursuant to such Executive Order.

Operator assures Non-Operator that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that he does not and will not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. For this purpose, it is understood that the phrase "segregated facilities" includes facilities which are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom or otherwise. It is further understood and agreed that maintaining or providing segregated facilities for its employees or permitting its employees to perform their services at any location under its control where segregated facilities are maintained is a violation of the equal opportunity clause required by Executive Order 11246 of September 24, 1965. Operator further understands and agrees that a breach of the assurance herein contained subjects it to the provisions of the Order at 41 CFR Chapter 60 of the Secretary of Labor, dated May 21, 1968, and the provisions of the equal opportunity clause enumerated in contracts between the United States of America and Non-Operator.



**RECORDING SUPPLEMENT TO  
OPERATING AGREEMENT AND FINANCING STATEMENT**

THIS AGREEMENT, entered into by and between Chesapeake Appalachia, L.L.C., hereinafter referred to as "Operator," and the signatory party or parties other than Operator, hereinafter referred to individually as "Non-Operator," and collectively as "Non-Operators."

WHEREAS, the parties to this agreement are owners of Oil and Gas Leases and/or Oil and Gas Interests in the land identified in Exhibit "A-1" and Exhibit "A-2" (said land, Leases and Interests being hereinafter called the "Contract Area"), and in any instance in which the Leases or Interests of a party are not of record, the record owner and the party hereto that owns the interest or rights therein are reflected on Exhibit "A-1" and Exhibit "A-2";

WHEREAS, the parties hereto have executed an Operating Agreement dated October 18, 2010 (herein the "Operating Agreement"), covering the Contract Area for the purpose of exploring and developing such lands, Leases and Interests for Oil and Gas; and

WHEREAS, the parties hereto have executed this agreement for the purpose of imparting notice to all persons of the rights and obligations of the parties under the Operating Agreement and for the further purpose of perfecting those rights capable of perfection.

NOW, THEREFORE, in consideration of the mutual rights and obligations of the parties hereto, it is agreed as follows:

1. This agreement supplements the Operating Agreement, ~~which Agreement in its entirety is incorporated herein for reference~~, and all terms used herein shall have the meaning ascribed to them in the Operating Agreement.

2. The parties do hereby agree that:

- A. The Oil and Gas Leases and/or Oil and Gas Interests of the parties comprising the Contract Area shall be subject to and burdened with the terms and provisions of this agreement and the Operating Agreement, and the parties do hereby commit such Leases and Interests to the performance thereof.
- B. The exploration and development of the Contract Area for Oil and Gas shall be governed by the terms and provisions of the Operating Agreement, as supplemented by this agreement.
- C. All costs and liabilities incurred in operations under this agreement and the Operating Agreement shall be borne and paid, and all equipment and materials acquired in operations on the Contract Area shall be owned, by the parties hereto, as provided in the Operating Agreement.
- D. Regardless of the record title ownership to the Oil and Gas Leases and/or Oil and Gas Interests identified on Exhibit "A," all production of Oil and Gas from the Contract Area shall be owned by the parties as provided in the Operating Agreement; provided nothing contained in this agreement shall be deemed an assignment or cross-assignment of interests covered hereby.
- E. Each party shall pay or deliver, or cause to be paid or delivered, all burdens on its share of the production from the Contract Area as provided in the Operating Agreement.
- F. An overriding royalty, production payment, net profits interest or other burden payable out of production hereafter created, assignments of production given as security for the payment of money and those overriding royalties, production payments and other burdens payable out of production heretofore created and defined as Subsequently Created Interests in the Operating Agreement shall be (i) borne solely by the party whose interest is burdened therewith, (ii) subject to suspension if a party is required to assign or relinquish to another party an interest which is subject to such burden, and (iii) subject to the lien and security interest hereinafter provided if the party subject to such burden fails to pay its share of expenses chargeable hereunder and under the Operating Agreement, all upon the terms and provisions and in the times and manner provided by the Operating Agreement.
- G. The Oil and Gas Leases and/or Oil and Gas Interests which are subject hereto may not be assigned or transferred except in accordance with those terms, provisions and restrictions in the Operating Agreement regulating such transfers.

This agreement and the Operating Agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective heirs, devisees, legal representatives, and assigns, and the terms hereof shall be deemed to run with the leases or interests included within the lease Contract Area.

- H. The parties shall have the right to acquire an interest in renewal, extension and replacement leases, leases proposed to be surrendered, wells proposed to be abandoned, and interests to be relinquished as a result of non-participation in subsequent operations, all in accordance with the terms and provisions of the Operating Agreement.
  - I. The rights and obligations of the parties and the adjustment of interests among them in the event of a failure or loss of title, each party's right to propose operations, obligations with respect to participation in operations on the Contract Area and the consequences of a failure to participate in operations, the rights and obligations of the parties regarding the marketing of production, and the rights and remedies of the parties for failure to comply with financial obligations shall be as provided in the Operating Agreement.
  - J. Each party's interest under this agreement and under the Operating Agreement shall be subject to relinquishment for its failure to participate in subsequent operations and each party's share of production and costs shall be reallocated on the basis of such relinquishment, all upon the terms and provisions provided in the Operating Agreement.
  - K. All other matters with respect to exploration and development of the Contract Area and the ownership and transfer of the Oil and Gas Leases and/or Oil and Gas Interest therein shall be governed by the terms and provisions of the Operating Agreement.
3. The parties hereby grant reciprocal liens and security interests as follows:

- A. Each party grants to the other parties hereto a lien upon any interest it now owns or hereafter acquires in Oil and Gas Leases and Oil and Gas Interests in the Contract Area, and a security interest and/or purchase money security interest in any interest it now owns or hereafter acquires in the personal property and fixtures on or used or obtained for use in connection therewith, to secure performance of all of its obligations under this agreement and the Operating Agreement including but not limited to payment of expense, interest and fees, the proper disbursement of all monies paid under this agreement and the Operating Agreement, the assignment or relinquishment of interest in Oil and Gas Leases as required under this agreement and the Operating Agreement, and the proper performance of operations under this agreement and the Operating Agreement. Such lien and security interest granted by each party hereto shall include such party's leasehold interests, working interests, operating rights, and royalty and overriding royalty interests in the Contract Area now owned or hereafter acquired and in lands pooled or unitized therewith or otherwise becoming subject to this for use in connection therewith (including, without limitation, all wells, tools, and tubular goods), and accounts (including, without limitation, accounts arising from the sale of production at the wellhead), contract rights, inventory and general intangibles relating thereto or arising therefrom, and all proceeds and products of the foregoing.
- B. Each party represents and warrants to the other parties hereto that the lien and security interest granted by such party to the other parties shall be a first and prior lien, and each party hereby agrees to maintain the priority of said lien and security interest against all persons acquiring an interest in Oil and Gas Leases and Interests covered by this agreement and the Operating Agreement by, through or under such party. All parties acquiring an interest in Oil and Gas Leases and Oil and Gas Interests covered by this agreement and the

Operating Agreement, whether by assignment, merger, mortgage, operation of law, or otherwise, shall be deemed to have taken subject to the lien and security interest granted by the Operating Agreement and this instrument as to all obligations attributable to such interest under this agreement and the Operating Agreement whether or not such obligations arise before or after such interest is acquired.

- C. To the extent that the parties have a security interest under the Uniform Commercial Code of the state in which the Contract Area is situated, they shall be entitled to exercise the rights and remedies of a secured party under the Code. The bringing of a suit and the obtaining of judgment by a party for the secured indebtedness shall not be deemed an election of remedies or otherwise affect the lien rights or security interest as security for the payment thereof. In addition, upon default by any party in the payment of its share of expenses, interest or fees, or upon the improper use of funds by the Operator, the other parties shall have the right, without prejudice to other rights or remedies, to collect from the purchaser the proceeds from the sale of such defaulting party's share of Oil and Gas until the amount owed by such party, plus interest, has been received, and shall have the right to offset the amount owed against the proceeds from the sale of such defaulting party's share of Oil and Gas. All purchasers of production may rely on a notification of default from the non-defaulting party or parties stating the amount due as a result of the default, and all parties waive any recourse available against purchasers for releasing production proceeds as provided in this paragraph.
  - D. If any party fails to pay its share of expenses within one hundred-twenty (120) days after rendition of a statement therefor by Operator the non-defaulting parties, including Operator, shall, upon request by Operator, pay the unpaid amount in the proportion that the interest of each such party bears to the interest of all such parties. The amount paid by each party so paying its share of the unpaid amount shall be secured by the liens and security rights described in this paragraph 3 and in the Operating Agreement, and each paying party may independently pursue any remedy available under the Operating Agreement or otherwise.
  - E. If any party does not perform all of its obligations under this agreement or the Operating Agreement, and the failure to perform subjects such party to foreclosure or execution proceedings pursuant to the provisions of this agreement or the Operating Agreement, to the extent allowed by governing law, the defaulting party waives any available right of redemption from and after the date of judgment, any required valuation or appraisal of the mortgaged or secured property prior to sale, any available right to stay execution or to require a marshalling of assets and any required bond in the event a receiver is appointed. In addition, to the extent permitted by applicable law, each party hereby grants to the other parties a power of sale as to any property that is subject to the lien and security rights granted hereunder or under the Operating Agreement, such power to be exercised in the manner provided by applicable law or otherwise in a commercially reasonable manner and upon reasonable notice.
  - F. The lien and security interest granted in this paragraph 3 supplements identical rights granted under the Operating Agreement.
  - G. Each party agrees that the other parties shall be entitled to utilize the provisions of Oil and Gas lien law or other lien law of any state in which the Contract Area is situated to enforce the obligations of each party hereunder and under the Operating Agreement. Without limiting the generality of the foregoing, to the extent permitted by applicable law, Non-Operators agree that Operator may invoke or utilize the mechanics' or materialmen's lien law of the state in which the Contract Area is situated in order to secure the payment to Operator of any sum due under this agreement and the Operating Agreement for services performed or materials supplied by Operator.
  - H. The above described security may be financed at the wellhead of the well or wells located on the Contract Area and this Recording Supplement may be filed in the land records in the County or Parish in which the Contract Area is located, and as a financing statement in all recording offices required under the Uniform Commercial Code or other applicable state statutes to perfect the above-described security interest, and any party hereto may file a continuation statement as necessary under the Uniform Commercial Code, or other state laws.
4. This agreement shall be effective as of the date of the Operating Agreement as above recited. Upon termination of this agreement and the Operating Agreement and the satisfaction of all obligations thereunder, Operator is authorized to file of record in all necessary recording offices a notice of termination, and each party hereto agrees to execute such a notice of termination as to Operator's interest, upon the request of Operator, if Operator has complied with all of its financial obligations.
  5. This agreement and the Operating Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, devisees, legal representatives, successors and assigns. No sale, encumbrance, transfer or other disposition shall be made by any party of any interest in the Leases or Interests subject hereto except as expressly permitted under the Operating Agreement and, if permitted, shall be made expressly subject to this agreement and the Operating Agreement and without prejudice to the rights of the other parties. If the transfer is permitted, the assignee of an ownership interest in any Oil and Gas Lease shall be deemed a party to this agreement and the Operating Agreement as to the interest assigned from and after the effective date of the transfer of ownership; provided, however, that the other parties shall not be required to recognize any such sale, encumbrance, transfer or other disposition for any purpose hereunder until thirty (30) days after they have received a copy of the instrument of transfer or other satisfactory evidence thereof in writing from the transferor or transferee. No assignment or other disposition of interest by a party shall relieve such party of obligations previously incurred by such party under this agreement or the Operating Agreement with respect to the interest transferred, including without limitation the obligation of a party to pay all costs attributable to an operation conducted under this agreement and the Operating Agreement in which such party has agreed to participate prior to making such assignment, and the lien and security interest granted by Article VII.B. of the Operating Agreement and hereby shall continue to burden the interest transferred to secure payment of any such obligations.
  6. Notwithstanding anything herein to the contrary, in the event of a conflict between the terms and provisions of this agreement and the terms and provisions of the Operating Agreement, then, as between the parties, the terms and provisions of the Operating Agreement shall control.
  7. This agreement shall be binding upon each Non-Operator when this agreement or a counterpart thereof has been executed by such Non-Operator and Operator notwithstanding that this agreement is not then or thereafter executed by all of the parties to which it is tendered or which are listed on Exhibit "A" as owning an interest in the Contract Area or which own, in fact, an interest in the Contract Area. In the event that any provision herein is illegal or unenforceable, the remaining provisions shall not be affected, and shall be enforced as if the illegal or unenforceable provision did not appear herein.

8. ~~Other Provisions:~~



1 Serena Branch, who has prepared and circulated this form for execution, represents and warrants  
 2 that the form was printed from and, with the exception(s) listed below, is identical to the AAPL Form 610RS-1989 Model  
 Form Recording Supplemental to Operating Agreement and Financing Statement, as published in computerized forms by  
 Forms On-A-Disk, Inc. No changes, alterations, or modifications, other than those made by strikethrough and/or insertions  
 3 ~~and that are clearly recognizable as changes in Articles \_\_\_\_\_~~, have been made to the form.

4 ATTEST OR WITNESS:

CHESAPEAKE APPALACHIA, L.L.C.,  
 OPERATOR

By \_\_\_\_\_

Henry J. Hood

Type or print name

Title Senior Vice President – Land and Legal & General Counsel

Date \_\_\_\_\_

Tax ID or S.S. No. 20-3774650

14 ATTEST OR WITNESS:

EPSILON ENERGY USA, INC., NON-OPERATOR

By \_\_\_\_\_

Zoran Arandjelovic

Type or print name

Title Executive Chairman, President and C.E.O.

Date May 24, 2011

Tax ID or S.S. No. \_\_\_\_\_

23 ATTEST OR WITNESS:

STATOIL USA ONSHORE PROPERTIES INC.,  
 NON-OPERATOR

By \_\_\_\_\_

M. K. Williams

Type or print name

Title Land Manager – Onshore Gas, Marcellus Asset

Date \_\_\_\_\_

Tax ID or S.S. No. FEIN 26-3666667



## ACKNOWLEDGMENT

OPERATOR:

STATE OF OKLAHOMA )

) SS:

COUNTY OF OKLAHOMA )

On this, the 13th day of May, 2021, before me, Jessica S. Meek, the undersigned officer, personally appeared, Henry J. Hood, who acknowledged himself to be the Senior Vice President - Land and Legal & General Counsel of Chesapeake Appalachia L.L.C., a corporation, and that he as such Senior Vice President - Land and Legal & General Counsel, being authorized to do so, executed foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as Senior Vice President - Land and Legal & General Counsel.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: 11-8-12Signature/Notary Public: [Signature]Name/Notary Public (print): Jessica S. Meek

## ACKNOWLEDGMENT

NON-OPERATORS:

PROVINCE OF  
~~STATE OF~~ ONTARIO )

) SS:

CITY OF  
~~COUNTY OF~~ VAUGHAN )

On this, the 5th day of May, 2021, before me \_\_\_\_\_, the undersigned officer, personally appeared, Zoran Arandjelovic, who acknowledged himself to be the Executive Chairman, President and C.E.O. of Epsilon Energy USA, INC., a corporation, and that he as such Executive Chairman, President and C.E.O., being authorized to do so, executed foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as Executive Chairman, President and C.E.O.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: n/aSignature/Notary Public: [Signature]Name/Notary Public (print): Joseph Feldman

STATE OF \_\_\_\_\_ )

) SS:

COUNTY OF \_\_\_\_\_ )

On this, the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me \_\_\_\_\_, the undersigned officer, personally appeared, M.K. Williams, who acknowledged himself to be the Land Manager - Onshore Gas, Marcellus Asset of Statoil USA Onshore Properties Inc., a corporation, and that he as such Land Manager - Onshore Gas, Marcellus Asset of Statoil USA Onshore Properties Inc., being authorized to do so, executed foregoing instrument for the purpose therein contained by signing the name of the corporation by himself as Land Manager - Onshore Gas, Marcellus Asset.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires: \_\_\_\_\_

Signature/Notary Public: \_\_\_\_\_

Name/Notary Public (print): \_\_\_\_\_

## Exhibit "A-1"

Attached to and made a part of the Recording Supplement to Operating Agreement and Financing Statement dated October 18, 2010, by and between Chesapeake Appalachia, L.L.C., Operator, Epsilon Energy USA, Inc., as Non-Operator, and Statoil USA Onshore Properties Inc., as Non-Operator

Baltzley North Unit  
Rush Township  
Susquehanna County, Pennsylvania

GHK LEASE ID	LESSOR	LESSEE	LEASE DATE	INSTRUMENT NUMBER	TAX ID NUMBER	TITLE ACRES	NET ACRES IN CONTRACT AREA
1-298558-000	Brett & Christel Flynn	Chesapeake Appalachia LLC	1/7/2010	201004957	157.00-1-019.00	10.1510	1.310000
1-298570-000	Robert and Arlene G Blom	Chesapeake Appalachia LLC	9/26/2009	201004963	157.00-1-020.00	21.3400	15.635010
1-271016-000	Lorna G Hall	Chesapeake Appalachia LLC	3/28/2009	200906705	157.15-1-004.00	2.7400	2.740000
1-255277-000	J Robert and Betty Hiles	Chesapeake Appalachia LLC	3/3/2008	200811255	157.00-1-016.00	13.0000	13.000000
1-293364-000	John M and Denise Hlivia	Chesapeake Appalachia LLC	12/8/2009	201020407	158.00-1-014.00	62.0000	0.150772
1-247550-000	Wayne P & Donna L Martin	Chesapeake Appalachia LLC	11/1/2007	200802809	157.00-1-050.00	23.4200	16.209998
1-289128-000	Clara McGavin	Chesapeake Appalachia LLC	9/29/2009	200917545	157.00-1-041.00	0.5000	0.500000
1-280918-000	Anthony J and Betty A Oruska	Chesapeake Appalachia LLC	3/28/2009	200910165	157.00-1-046.00	1.0700	1.070000
1-266222-000	Sandra L and James D Rogers	Chesapeake Appalachia LLC	8/7/2008	200017964	157.15-1-022.00	0.9200	0.920000
1-271018-000	Ronald D & Cathy L Severs	Chesapeake Appalachia LLC	3/22/2009	200906706	157.15-1-030.00	0.9500	0.950000
1-273840-000	Robert D and Julie A Shindler	Chesapeake Appalachia LLC	3/30/2009	200908612	157.15-1-027.00	1.1188	1.118750
1-259349-000	Wayne and Linda Smith	Chesapeake Appalachia LLC	4/28/2008	200814786	157.15-1-028.00	3.8600	3.860000
1-273846-000	Charles E Warner Jr	Chesapeake Appalachia LLC	4/14/2009	200908605	157.00-1-039.00	1.7900	1.790000
1-249048-000	Terry and Karin Wescott	Chesapeake Appalachia LLC	11/27/2007	200805343	157.15-1-001.00	4.4897	4.489700
1-306756-000	Jacob Fissler	Chesapeake Appalachia LLC	3/31/2010	201012052	157.15-1-006.00	0.5000	0.500000
1-307028-000	Robert L JR and Jamie S Heft	Chesapeake Appalachia LLC	4/23/2010	201012064	157.00-1-040.00	1.6338	1.633750
1-304364-000	Christopher P Warriner	Chesapeake Appalachia LLC	3/9/2010	201006507	157.15-1-009.00	0.5241	0.524100
1-273827-000	Rodney S and Stephanie M Brace	Chesapeake Appalachia LLC	3/31/2009	200907631	157.15-1-012.00	0.8426	0.842600
1-273819-000	William T Chance	Chesapeake Appalachia LLC	4/6/2009	200907534	157.00-1-100.00	2.0700	2.070000
1-321731-000	Rush United Methodist Church	Chesapeake Appalachia LLC	4/16/2010	201100188	157.15-1-011.00	0.2875	0.287500
	David L and Sandra L Beaumont	Southwestern Energy Production Company	8/5/2007	200709957	157.00-1-052.00	80.0000	68.038567
	Holly Decker	Southwestern Energy Production Company	9/24/2009	200917567	157.15-1-013.00	0.4060	0.406000
	Judy Y Krupinski	Southwestern Energy Production Company	5/10/2007	200707270	158.00-1-010.00	23.6400	0.347414
1-301800-000	Michael and Nicole M Repchick	Chesapeake Appalachia LLC	1/9/2010	201005317	157.15-1-014.00	0.3000	0.300000
1-301823-000	Francis and Patricia Flynn	Chesapeake Appalachia LLC	1/7/2010	201005724	157.15-1-015.00	0.9900	0.990000
1-313723-000	Alar Family Limited, Partnership	Chesapeake Appalachia LLC	7/8/2010	201020876	157.00-1-032.01	0.3300	0.330000
1-313225-000	Odd Fellows Hall Association of Rush	Chesapeake Appalachia LLC	4/20/2010	201019671	157.15-1-008.00	0.1900	0.190000
1-308497-002	Robert J and Mary T Rudolph	Chesapeake Appalachia LLC	3/30/2010	201015807	157.00-1-060.00	39.3000	0.349668
1-309702-000	Edward P and Jessica R Warner	Chesapeake Appalachia LLC	4/10/2010	201016802	157.15-1-010.00	0.4645	0.464500
37-000070-000	William R and Arlene J Tonzelli	Chesapeake Appalachia LLC	10/18/2010	201102552	157.15-1-023.00	0.3440	0.344400
1-297572-000	David Evan Baltzley	Epsilon Energy USA, Inc.	5/16/2007	200708064	176.00-1-012.00	107.6000	19.615173
1-297594-000	Colin and Diana Burrridge	Epsilon Energy USA, Inc.	9/19/2007	200800145	157.00-1-043.00	55.3400	55.340000
1-297539-000	Ronald and Brenda Decker	Epsilon Energy USA, Inc.	11/7/2007	200800774	158.00-1-008.00	439.8500	14.566554
1-297597-000	David C Jenner	Epsilon Energy USA, Inc.	3/21/2007	200704240	157.00-1-049.01	13.8800	13.880000
1-297597-000	David C Jenner	Epsilon Energy USA, Inc.	3/21/2007	200704240	157.00-1-105.00	40.3500	1.514034

1-297589-000	Paul A Jones	Epsilon Energy USA, Inc.	7/17/2007	200709894	157.00-1-042.00	67.7000	50.300285
1-297646-000	Thomas I and Cynthia L Moore	Epsilon Energy USA, Inc.	10/31/2007	200801949	157.00-1-092.00	1.7400	0.503576
1-297646-000	Thomas I and Cynthia L Moore	Epsilon Energy USA, Inc.	10/31/2007	200801949	157.00-1-030.00	9.3500	0.443710
1-297606-000	Kenneth B and Janice Pittman	Epsilon Energy USA, Inc.	5/7/2007	200708072	176.00-1-009.00	40.9300	27.331418
1-297684-000	Elmer W and Karen A Jr Richie	Epsilon Energy USA, Inc.	12/5/2007	200802016	157.00-1-102.00	2.0000	1.374015

END OF EXHIBIT "A-1"



Attached to and made a part of the Recording Supplement to Operating Agreement and Financing Statement dated October 18, 2010, by and between Chesapeake Appalachia, L.L.C., Epsilon Energy USA, Inc., and Statoil USA Onshore Properties Inc.

